

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT
(highlight changes)

APPLICATION FOR PERMIT TO DRILL			5. MINERAL LEASE NO: ST UO 1194A	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			8. UNIT or CA AGREEMENT NAME: 891008900A	
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP			9. WELL NAME and NUMBER: NBU 921-27C2D	
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY Denver STATE CO ZIP 80217-3779		PHONE NUMBER: (720) 929-6226	10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 650' FNL & 1730' FWL LAT 40.012572 LON -109.540483 (NAD 27) AT PROPOSED PRODUCING ZONE: N/A			11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 27 9S 21E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 16.5 miles northeast of Ouray, Utah			12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 650'	16. NUMBER OF ACRES IN LEASE: 1292.39	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 10		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 150'	19. PROPOSED DEPTH: 9,900	20. BOND DESCRIPTION: RLB0005237		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 4953 GR	22. APPROXIMATE DATE WORK WILL START:	23. ESTIMATED DURATION: 10 days		

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
12 1/4"	9 5/8"	J-55	36#	2,400	Premium Cement	215 sx	1.18	15.6
					Premium Cement	100 sx	1.18	15.6
7 7/8"	4 1/2"	I-80	11.6#	9,900	Premium Lite II	480 sx	3.38	11.0
					50/50 Poz G	1640 sx	1.31	14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Kevin McIntyre TITLE Regulatory Analyst I

SIGNATURE *Kevin McIntyre* DATE 7/2/2008

(This space for State use only)

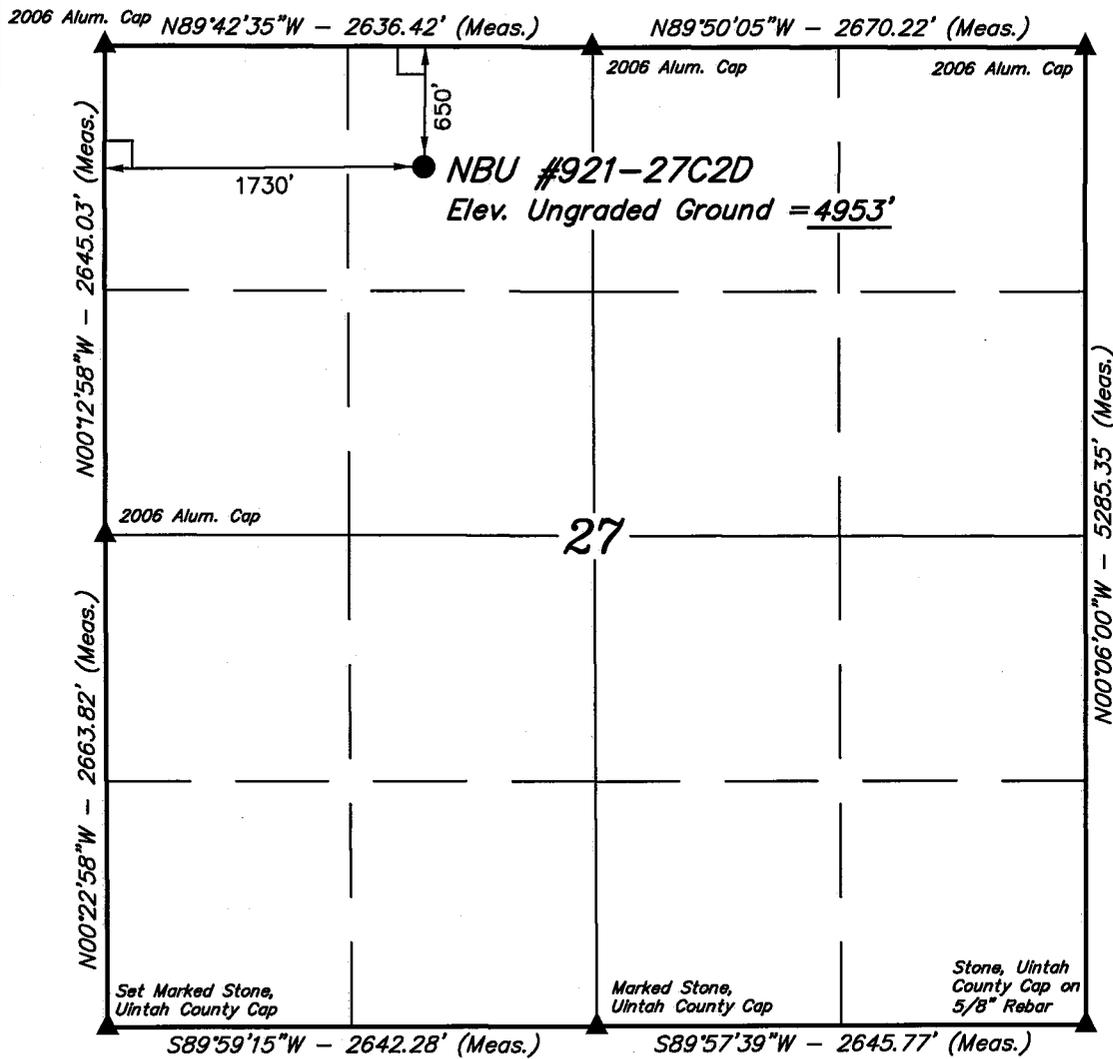
**Approved by the
Utah Division of
Oil, Gas and Mining**

API NUMBER ASSIGNED: 43-042-40227

APPROVAL:
Date: 11-04-08
By: *[Signature]*

RECEIVED
JUL 10 2008
DIV. OF OIL, GAS & MINING

T9S, R21E, S.L.B.&M.



LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)
 LATITUDE = 40°00'45.13" (40.012536)
 LONGITUDE = 109°32'28.22" (109.541172)
 (NAD 27)
 LATITUDE = 40°00'45.26" (40.012572)
 LONGITUDE = 109°32'25.74" (109.540483)

Kerr-McGee Oil & Gas Onshore LP

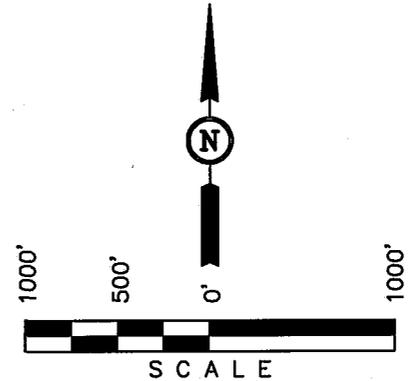
Well location, NBU #921-27C2D, located as shown in the NE 1/4 NW 1/4 of Section 27, T9S, R21E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

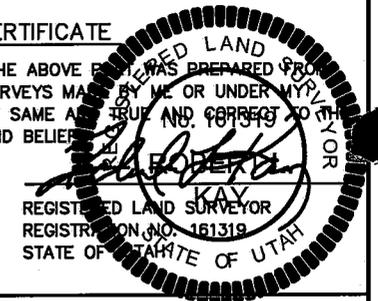
BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE SURVEY WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



UINTAH ENGINEERING & LAND SURVEYING
 85 SOUTH 200 EAST - VERNAL, UTAH 84078
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 05-21-08	DATE DRAWN: 05-29-08
PARTY D.K. C.K. C.C.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

NBU 921-27C2D
NENW Sec. 27, T9S, R21E
UINTAH COUNTY, UTAH
ST UO 1194A

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1567'
Birds Nest	1880'
Mahogany	2392'
Wasatch	4891'
Mesaverde	7789'
MVU2	8731'
MVL1	9325'
TD	9900'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1567'
Water	Birds Nest	1880'
Water	Mahogany	2392'
Gas	Wasatch	4891'
Gas	Mesaverde	7789'
Gas	MVU2	8731'
Gas	MVL1	9325'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

6. **Evaluation Program:**

Please refer to the attached Drilling Program.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9,900' TD, approximately equals 6138 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3960 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variations:**

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet.

The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

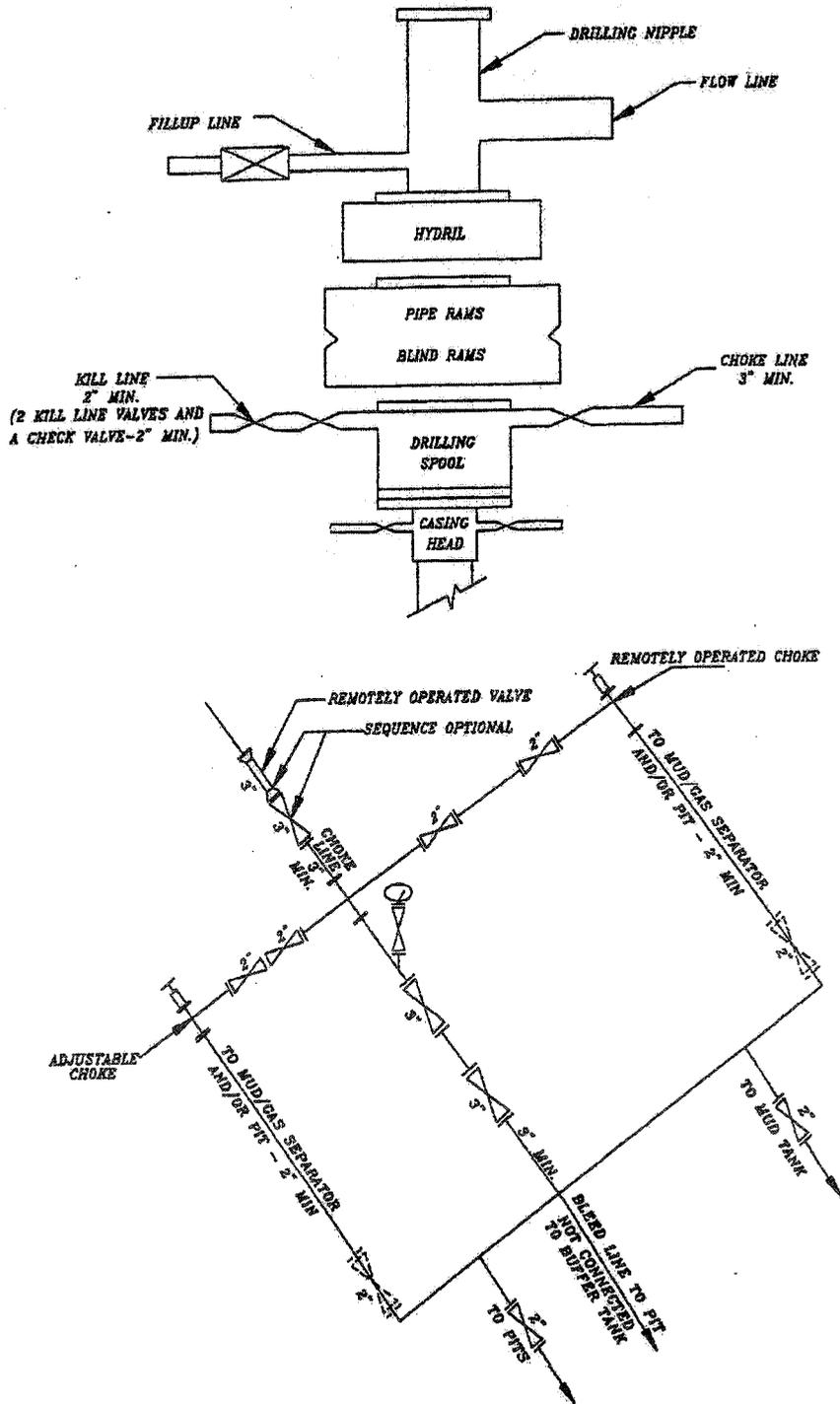
Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

NBU 921-27C2D
NENW SEC. 27, T9S, R21E
UINTAH COUNTY, UTAH
ST UO 1194A

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

Approximately 30' +/- of new access road is proposed. Please refer to the attached Topo Map B.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 30' of 4" pipeline is proposed. Refer to Topo D for the proposed pipeline.

5. **Location and Type of Water Supply:**

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. **Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. **Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with

dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility, Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond, SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond, Sec. 2, T10S, R23E.

8. **Ancillary Facilities:**

None are anticipated.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of

irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. Surface/Mineral Ownership:

SITLA
675 East 500 South, Suite 500
Salt Lake City, UT 84102

12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. Lessee's or Operators's Representative & Certification:

Kevin McIntyre
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6226

Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



Kevin McIntyre

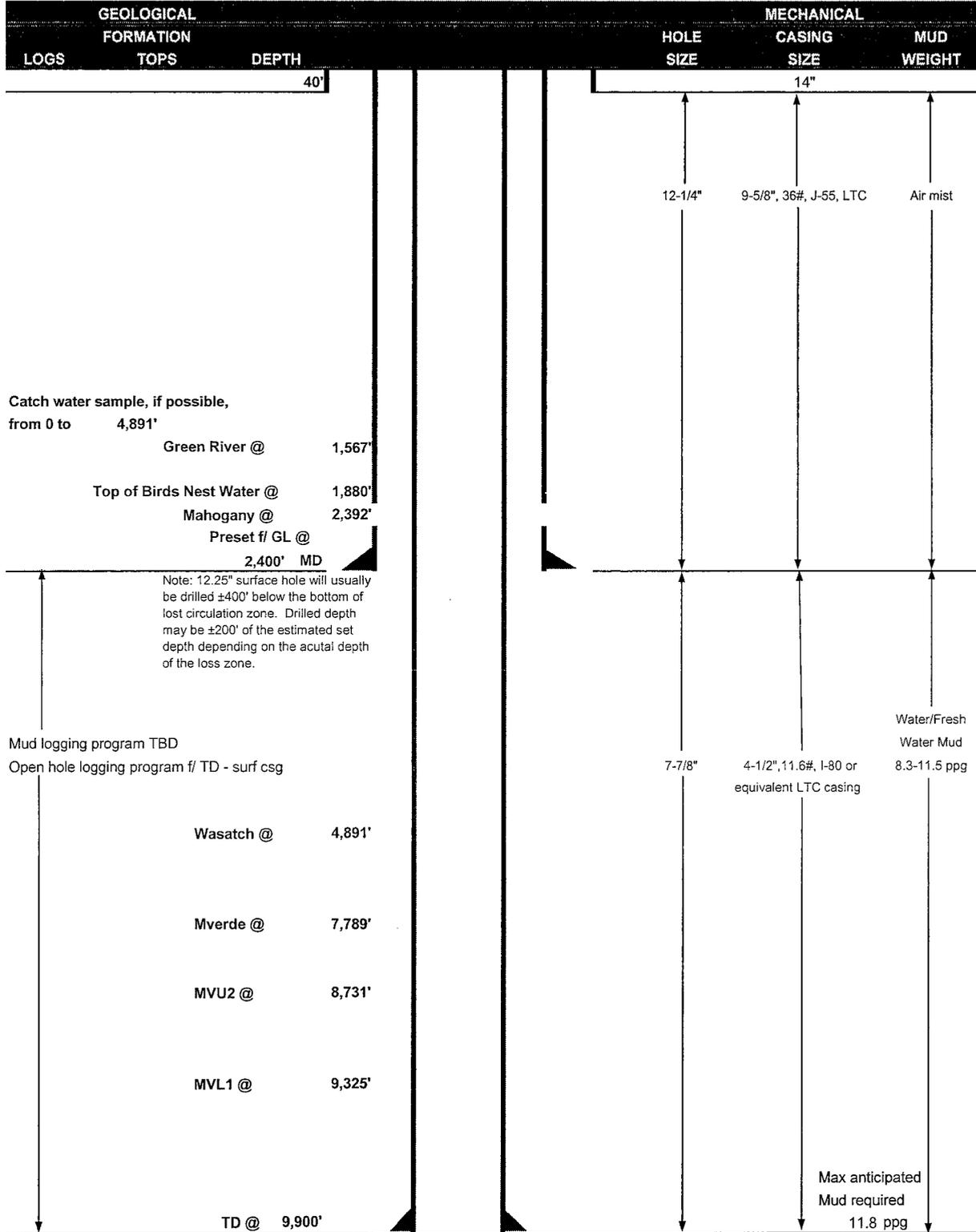
6/26/2008

Date



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE July 7, 2008
 WELL NAME NBU 921-27C2D TD 9,900' MD/TVD
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 4,953' GL KB 4,968'
 SURFACE LOCATION NENW 650' FNL & 1730' FWL, Sec. 27, T9S, R21E BHL Straight Hole
 Latitude: 40.012572 Longitude: -109.540483 NAD 27
 OBJECTIVE ZONE(S) Wasatch/Mesaverde
 ADDITIONAL INFO Regulatory Agencies: UDOGM (SURF & MINERALS), BLM, Tri-County Health Dept.



CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0 to 2,400'	36.00	J-55	LTC	3520	2020	453000
						0.90	1.80	5.99
PRODUCTION	4-1/2"	0 to 9900	11.60	I-80	LTC	7780	6350	201000
						2.00	1.05	2.01

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 11.8 ppg) .22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3960 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	100		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite +.25 pps Flocele + 3% salt BWOC	230	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,390'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	480	60%	11.00	3.38
	TAIL	5,510'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1540	60%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.
BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.
Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____
Brad Laney

DRILLING SUPERINTENDENT: _____
Randy Bayne NBU 921-27C2D.xls

DATE: _____
DATE: _____

IPC #08-115

Paleontological Reconnaissance Survey Report

**Survey of Kerr McGee's Proposed Well Pads, Access Roads, and
Pipelines for "NBU #921-27, C2D, D2DS, D2AS, C2AS
(Pad 57N)" (Sec. 27, T 9 S, R 21 E) & "NBU
#1022-32, B3S, D4DS, D4AS, D1S"
(Sec. 32, T 10 S, R 22 E)**

Archy Bench & Ouray SE
Topographic Quadrangle
Uintah County, Utah

June 11, 2008

Prepared by Stephen D. Sandau
Paleontologist for
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P. O. Box 1125
Vernal, Utah 84078

INTRODUCTION

At the request of Raleen White of Kerr McGee Oil & Gas Onshore LP and authorized by James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Kerr McGee's proposed "NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)" (Sec. 27, T 9 S, R 21 E) & "NBU #1022-32, B3S, D4DS, D4AS, D1S" (Sec. 32, T 10 S, R 22 E) was conducted by Stephen Sandau and Daniel Burk on June 3, 2008. The survey was conducted under Utah Paleontological Investigations Permit #07-356. This survey to collect any paleontological materials discovered during the construction processes in danger of damage or destruction was done to meet requirements of the National Environmental Policy Act of 1969, and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the State of Utah, paleontologically-sensitive geologic formations on State lands that may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

- 1) The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et. Seq., P.L. 91-190);
- 2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579).
- 3) The National Historic Preservation Act. 16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320; and
- 4) The Utah Geological Survey. S. C. A.: 63-73-1. (1-21) and U.C.A.: 53B-17-603.

The new Potential Fossil Yield Classification (PFYC) System (October, 2007) replaces the Condition Classification System from Handbook H-8270-1. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- **Class 1 – Very Low.** Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- **Class 2 – Low.** Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial, and colluvial deposits etc...)
- **Class 3 – Moderate or Unknown.** Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.
 - **Class 3a – Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.
 - **Class 3b – Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.
- **Class 4 – High.** Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.

- **Class 4a** – Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
- **Class 4b** – Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- **Class 5 – Very High.** Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
 - **Class 5a** - Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
 - **Class 5b** - Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

LOCATION

Kerr McGee's proposed well pads, access roads, and pipelines for "NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)" (Sec. 27, T 9 S, R 21 E) & "NBU #1022-32, B3S, D4DS, D4AS, D1S" (Sec. 32, T 10 S, R 22 E) is located on lands managed by the State of Utah Trust Lands Administration (SITLA) one in the Cottonwood and Sand Wash area, 4 miles south of the White River, and approximately 9 miles southeast of Ouray, Utah, and the other in the East Bench area, approximately 16 miles southeast of Ouray, Utah. The project area can be found on the Archy Bench & Ouray SE 7.5 minute U. S. Geological Survey Quadrangle Maps, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) ranging in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992) and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded, coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929) and the Myton Member previously regarded as the Uinta C.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments inter-fingering with over-bank deposits of silt and mudstone and westward flowing channel sands and fluvial clays, muds, and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology, and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well-known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

The Duchesne River Formation of the Uinta Basin in northeastern Utah is composed of a succession of fluvial and flood plain deposits composed of mud, silt and sandstone. The source area for these late Eocene deposits is from the Uinta Mountains indicated by paleocurrent data (Anderson and Picard, 1972). In Peterson's (1931c) paper, the name "Duchesne Formation" was applied to the formation and it was later changed to the "Duchesne River Formation" by Kay (1934). The formation is divided up into four members: the Brennan Basin, Dry Gulch Creek, LaPoint, and Starr Flat (Anderson and Picard, 1972). Debates concerning the Duchesne River Formation, as to whether its age was late Eocene or early Oligocene, have surfaced throughout the literature of the last century (Wood et al., 1941; Scott 1945). Recent paleo-magnetostratigraphic work (Prothero, 1996) shows that the Duchesne River Formation is late Eocene in time.

FIELD METHODS

In order to determine if the proposed project area contained any paleontological resources, a reconnaissance survey was performed. An on-site observation of the proposed areas undergoing surficial disturbance is necessary because judgments made from topographic maps alone are often unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces and are of particular importance.

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual wells and their associated pipelines and access roads.

NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)

The proposed twin well pad upgrade and pipeline are located in the NE/NW quarter-quarter section of Sec. 27, T 9 S, R 21 E (Figure 1). The proposed twin well pad upgrade and pipeline are located on previously disturbed area and sandy colluvium derived from the underlying Wagonhound which outcrops on the west edge of the proposed well pad upgrade. The outcrops are on the surface and are gray-green, medium-grained, sandstone. No fossils were found.

NBU #1022-32, B3S, D4DS, D4AS, D1S

The proposed twin well pad upgrade, pipeline re-route, and road re-route are located in the NE/NW quarter-quarter section of Sec. 32, T 10 S, R 22 E (Figure 2). The proposed well pad upgrade is located on an existing road. The proposed pipeline and road re-routes are go around the proposed well pad to the north. The proposed twin well pad upgrade, pipeline re-route, and road re-route are located on sandy colluvium in an area surrounded by 75 to 100 feet high hills with outcrops of tan and maroon sandstones and siltstones. Scattered, unidentifiable bone chips were found along the east end of the proposed pipeline and road re-routes but no other fossil were found.

SURVEY RESULTS

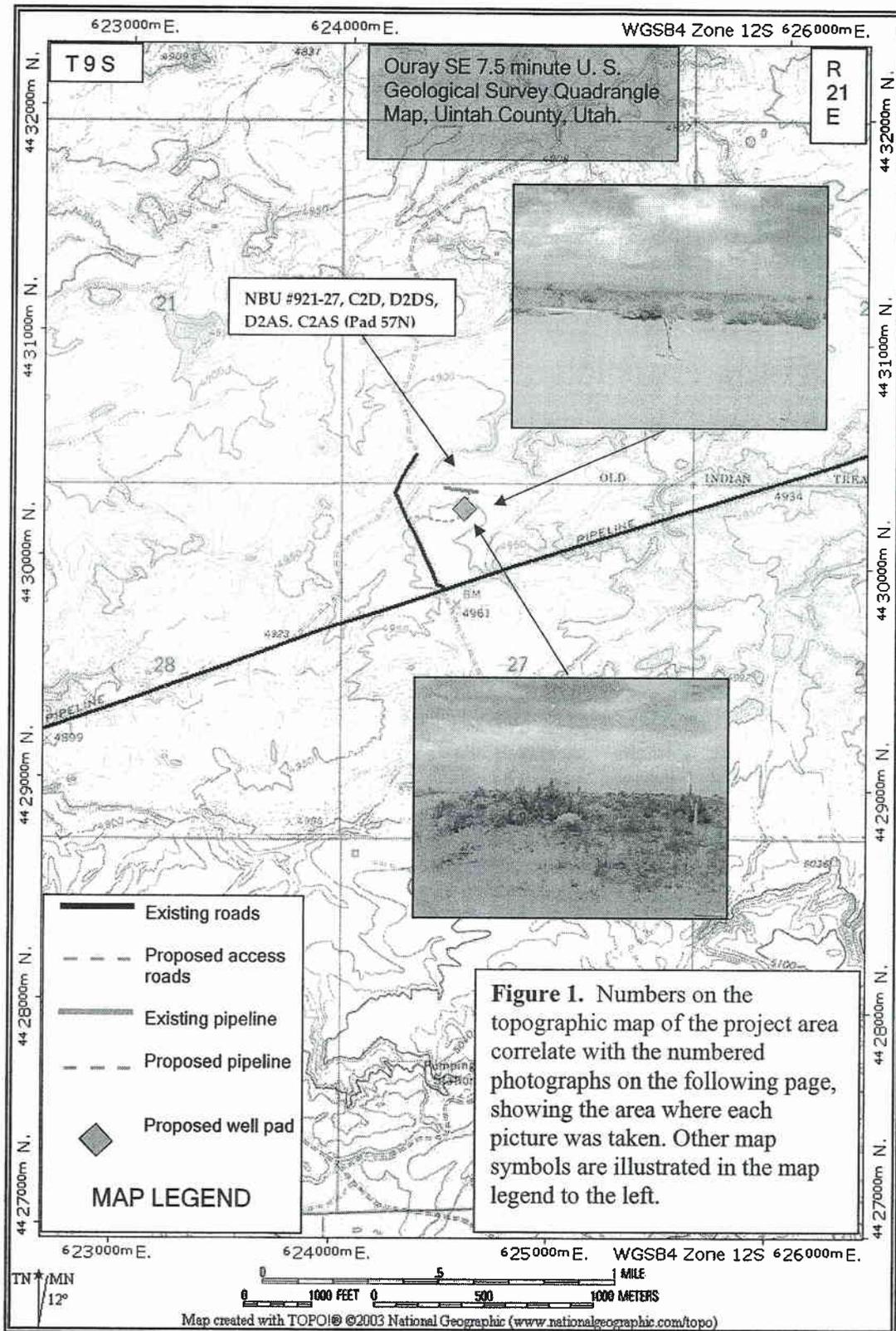
PROJECT	GEOLOGY	PALEONTOLOGY
<p>“NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)” (Sec. 27, T 9 S, R 21 E)</p>	<p>The proposed twin well pad upgrade and pipeline are located on previously disturbed area and sandy colluvium derived from the underlying Wagonhound which outcrops on the west edge of the proposed well pad upgrade. The outcrops are on the surface and are gray-green, medium-grained, sandstone.</p>	<p>No fossils were found. Class 3a</p>
<p>“NBU #1022-32, B3S, D4DS, D4AS, D1S” (Sec. 32, T 10 S, R 22 E)</p>	<p>The proposed twin well pad upgrade, pipeline re-route, and road re-route are located on sandy colluvium in an area surrounded by 75 to 100 feet high hills with outcrops of tan and maroon sandstones and siltstones.</p>	<p>Scattered, unidentifiable bone chips were found along the east end of the proposed pipeline and road re-routes but no other fossil were found. Class 3a</p>

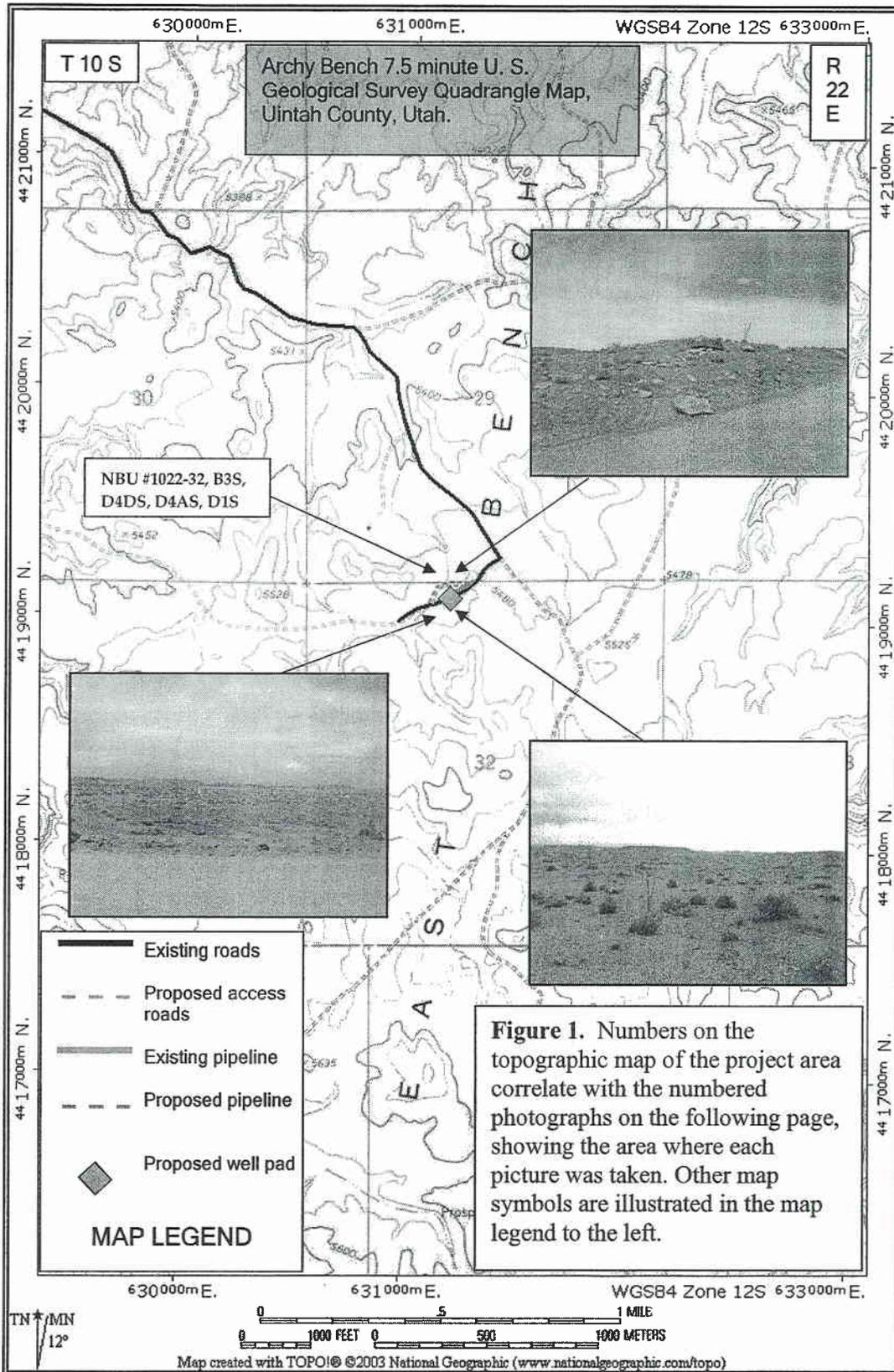
RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee’s proposed well pad, access road, and pipeline for “NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)” (Sec. 27, T 9 S, R 21 E) & “NBU #1022-32, B3S, D4DS, D4AS, D1S” (Sec. 32, T 10 S, R 22 E). The well pads and the associated access roads and pipelines covered in this report showed no signs of vertebrate fossils. Therefore, we recommend that no paleontological restrictions should be placed on the development of the projects included in this report.

Buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors yet indications from surface fossils predict that little if any vertebrate fossils will be disturbed.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, Operator (Lease Holder) will report all occurrences of paleontological resources discovered to a geologist with the Office of the State Paleontologist. The operator is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the State as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage.





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PROJECT AREA

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NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)

The proposed twin well pad upgrade and pipeline are located in the NE/NW quarter-quarter section of Sec. 27, T 9 S, R 21 E (Figure 1). The proposed twin well pad upgrade and pipeline are located on previously disturbed area and sandy colluvium derived from the underlying Wagonhound which outcrops on the west edge of the proposed well pad upgrade. The outcrops are on the surface and are gray-green, medium-grained, sandstone. No fossils were found.

NBU #1022-32, B3S, D4DS, D4AS, D1S

The proposed twin well pad upgrade, pipeline re-route, and road re-route are located in the NE/NW quarter-quarter section of Sec. 32, T 10 S, R 22 E (Figure 2). The proposed well pad upgrade is located on an existing road. The proposed pipeline and road re-routes are go around the proposed well pad to the north. The proposed twin well pad upgrade, pipeline re-route, and road re-route are located on sandy colluvium in an area surrounded by 75 to 100 feet high hills with outcrops of tan and maroon sandstones and siltstones. Scattered, unidentifiable bone chips were found along the east end of the proposed pipeline and road re-routes but no other fossil were found.

SURVEY RESULTS

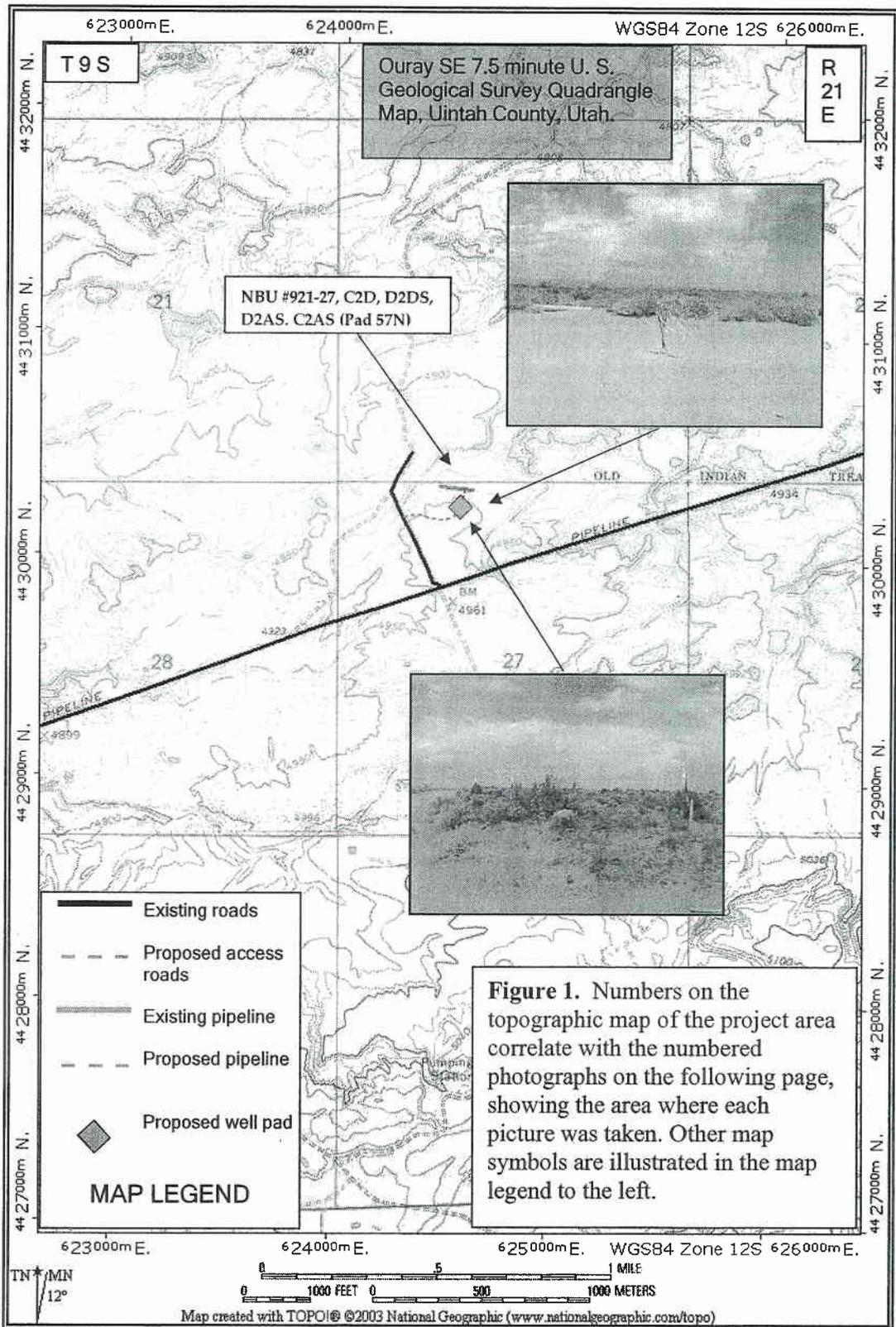
PROJECT	GEOLOGY	PALEONTOLOGY
<p>“NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)” (Sec. 27, T 9 S, R 21 E)</p>	<p>The proposed twin well pad upgrade and pipeline are located on previously disturbed area and sandy colluvium derived from the underlying Wagonhound which outcrops on the west edge of the proposed well pad upgrade. The outcrops are on the surface and are gray-green, medium-grained, sandstone.</p>	<p>No fossils were found. Class 3a</p>
<p>“NBU #1022-32, B3S, D4DS, D4AS, D1S” (Sec. 32, T 10 S, R 22 E)</p>	<p>The proposed twin well pad upgrade, pipeline re-route, and road re-route are located on sandy colluvium in an area surrounded by 75 to 100 feet high hills with outcrops of tan and maroon sandstones and siltstones.</p>	<p>Scattered, unidentifiable bone chips were found along the east end of the proposed pipeline and road re-routes but no other fossil were found. Class 3a</p>

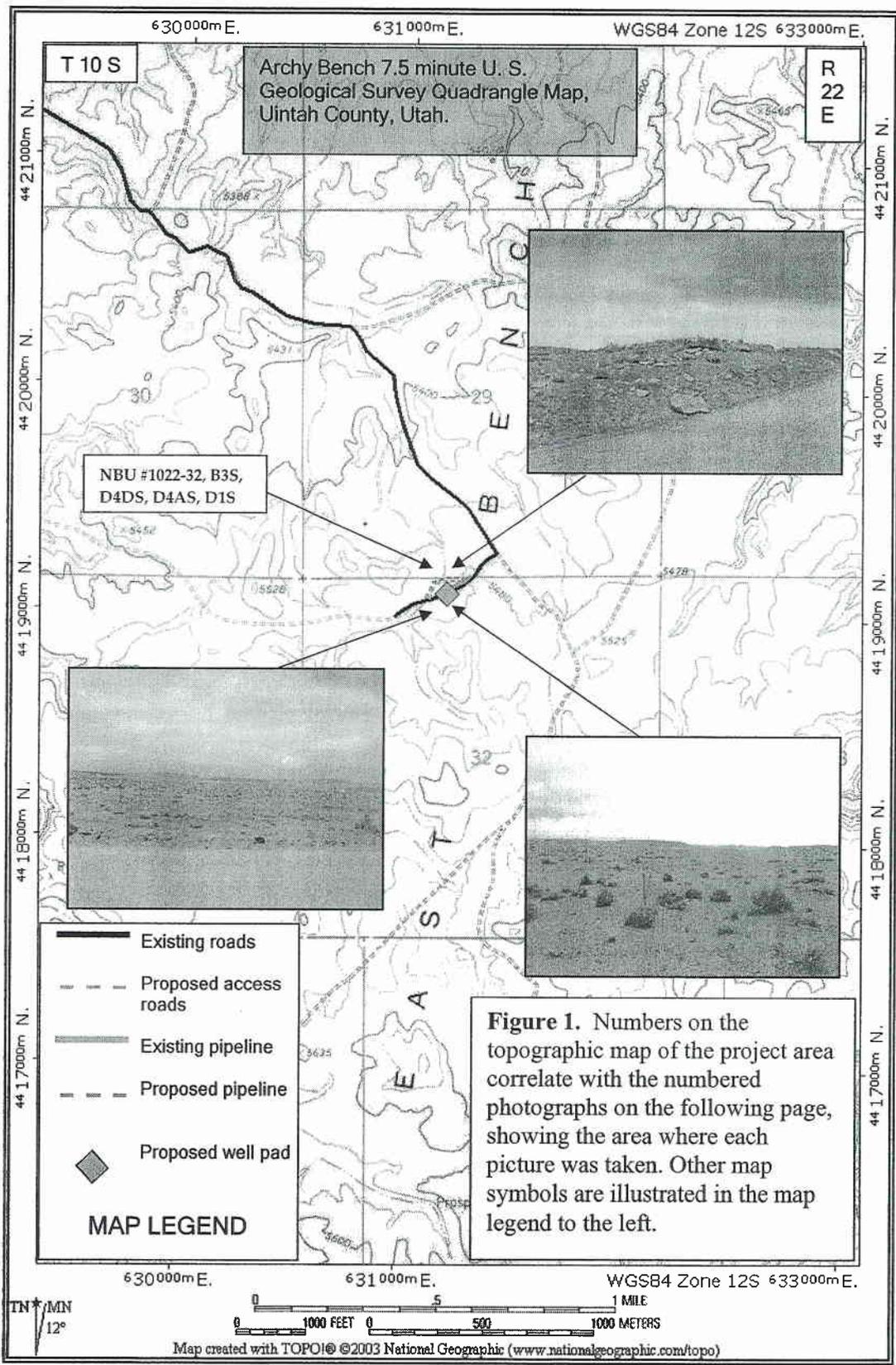
RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee’s proposed well pad, access road, and pipeline for “NBU #921-27, C2D, D2DS, D2AS, C2AS (Pad 57N)” (Sec. 27, T 9 S, R 21 E) & “NBU #1022-32, B3S, D4DS, D4AS, D1S” (Sec. 32, T 10 S, R 22 E). The well pads and the associated access roads and pipelines covered in this report showed no signs of vertebrate fossils. Therefore, we recommend that no paleontological restrictions should be placed on the development of the projects included in this report.

Buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors yet indications from surface fossils predict that little if any vertebrate fossils will be disturbed.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, Operator (Lease Holder) will report all occurrences of paleontological resources discovered to a geologist with the Office of the State Paleontologist. The operator is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the State as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage.





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Kerr-McGee Oil & Gas Onshore LP

NBU #921-27C2AS, #921-27D2AS,
#921-27C2D & #921-27D2DS
SECTION 27, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 47.5 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #921-27C2AS, #921-27D2AS,

#921-27C2D & #921-27D2DS

LOCATED IN UINTAH COUNTY, UTAH

SECTION 27, T9S, R21E, S.L.B.&M.

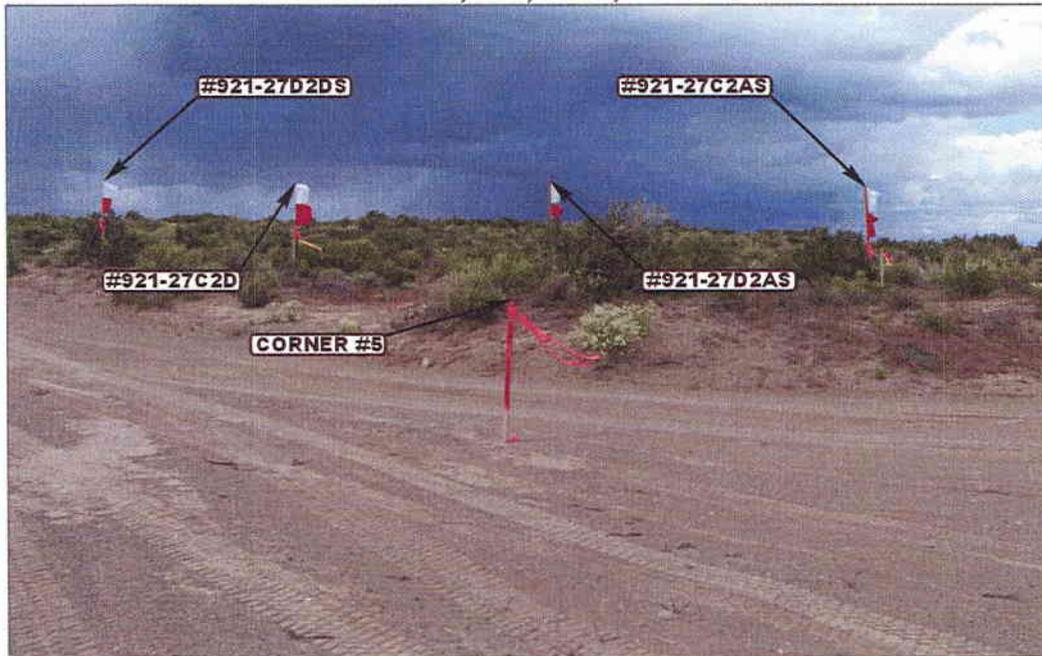


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: NORTHWESTERLY

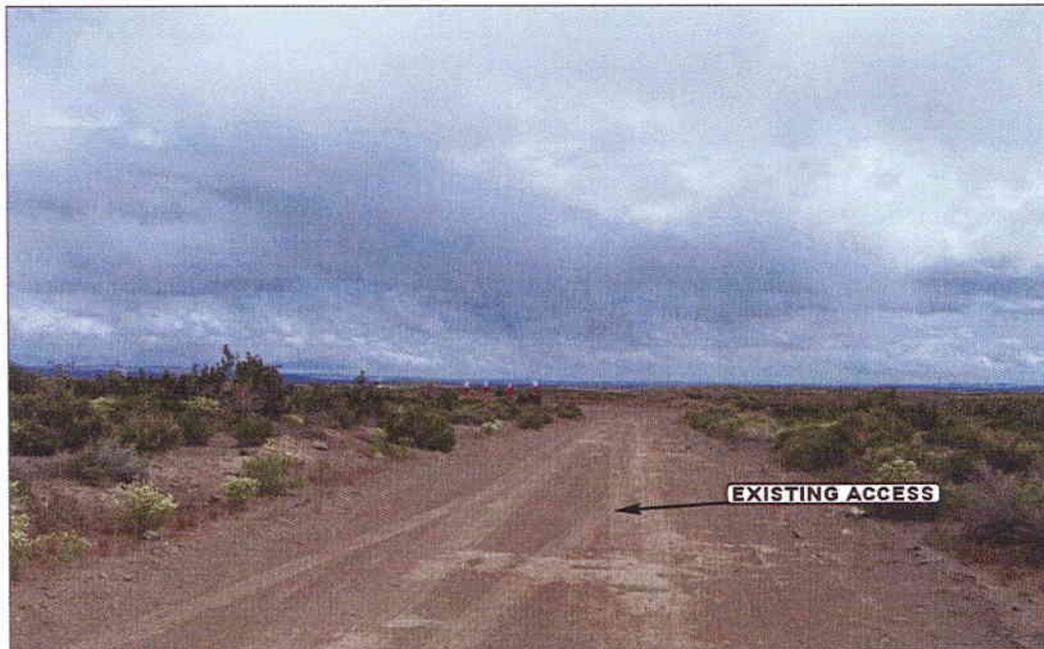


PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

05 29 08
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K. | DRAWN BY: Z.L. | REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP

NBU #921-27C2AS, #921-27D2AS,

#921-27C2D & #921-27D2DS

PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH

SECTION 27, T9S, R21E, S.L.B.&M.



PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: SOUTHERLY



- Since 1964 -



Uintah Engineering & Land Surveying

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435-789-1017 uels@uelsinc.com

PIPELINE PHOTOS

05 29 08
MONTH DAY YEAR

PHOTO

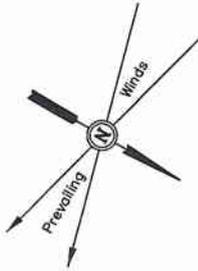
TAKEN BY: D.K. | DRAWN BY: Z.L. | REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP

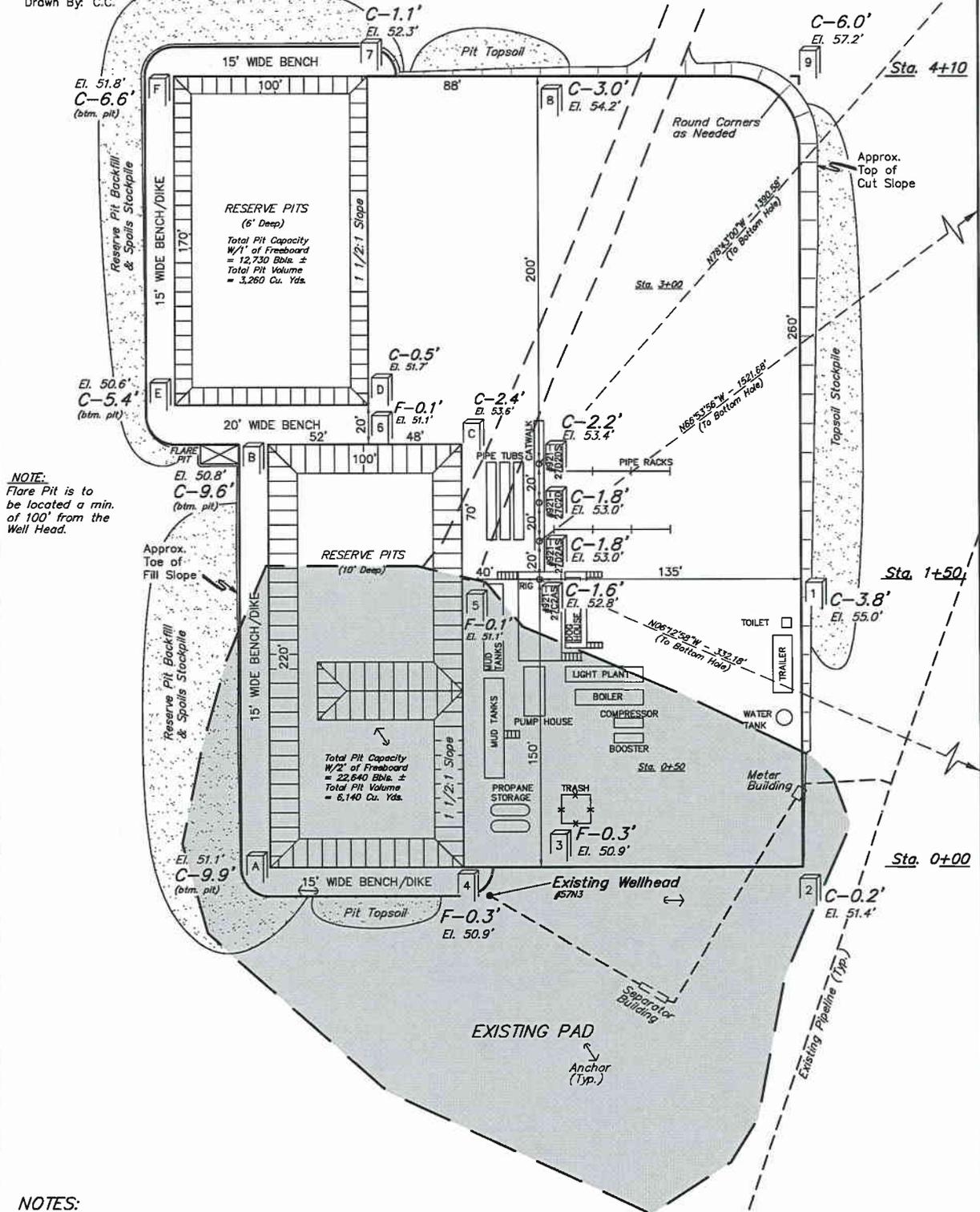
SITE PLAN LAYOUT FOR

NBU #921-27C2AS, #921-27D2AS,
#921-27C2D & #921-27D2DS
SECTION 27, T9S, R21E, S.L.B.&M.
NE 1/4 NW 1/4

FIGURE #1



SCALE: 1" = 50'
DATE: 05-29-08
Drawn By: C.C.



NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

NOTES:

Elev. Ungraded Ground At #921-27C2AS Loc. Stake = 4952.8'
FINISHED GRADE ELEV. AT #921-27C2AS LOC. STAKE = 4951.2'

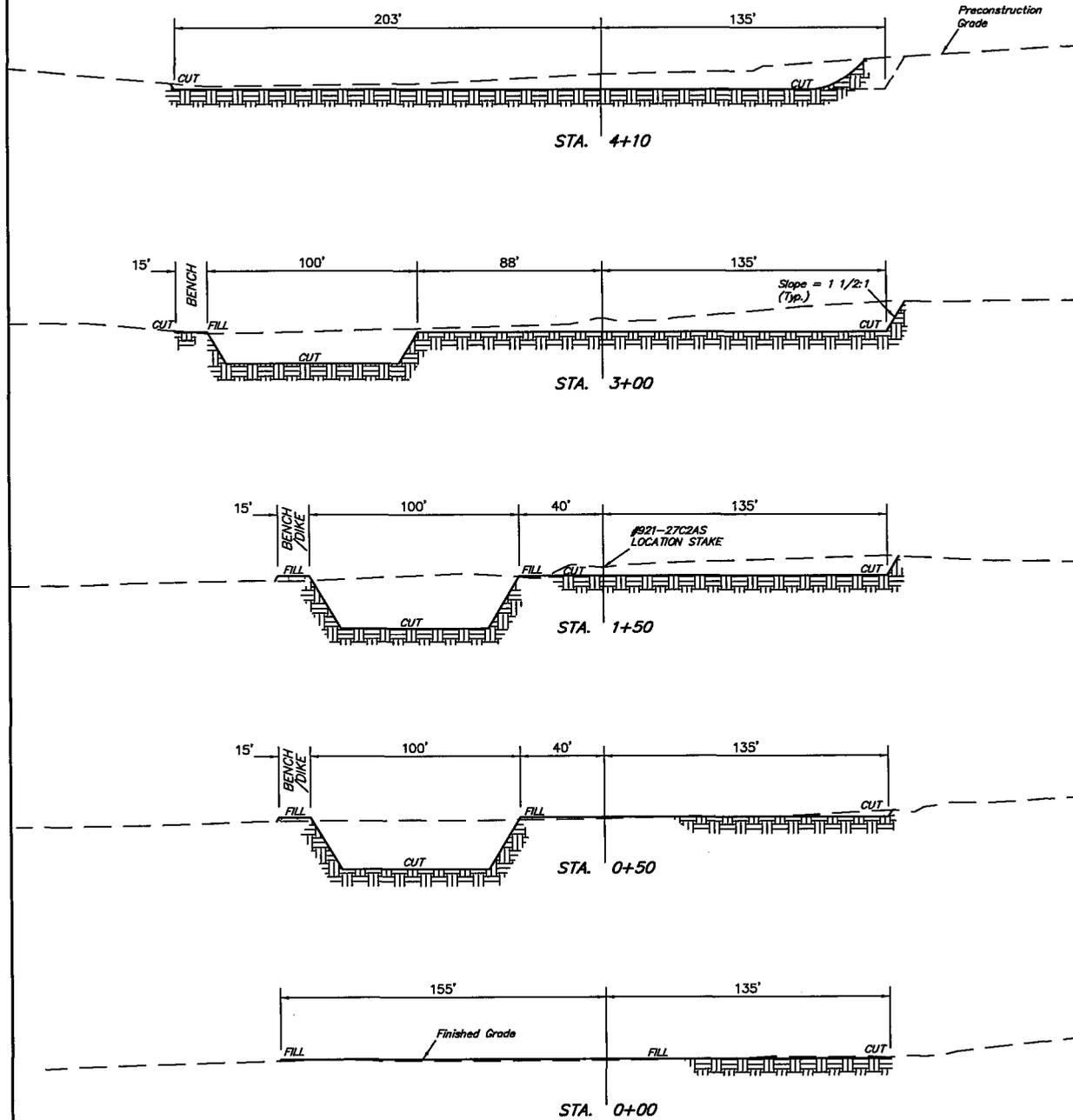
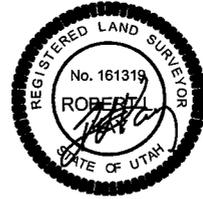
Kerr-McGee Oil & Gas Onshore LP

TYPICAL CROSS SECTIONS FOR

NBU #921-27C2AS, #921-27D2AS,
 #921-27C2D & #921-27D2DS
 SECTION 27, T9S, R21E, S.L.B.&M.
 NE 1/4 NW 1/4

FIGURE #2

1" = 20'
 X-Section
 Scale
 1" = 50'
 DATE: 05-29-08
 Drawn By: C.C.



NOTE:
 Topsoil should not be
 Stripped Below Finished
 Grade on Substructure Area.

* NOTE:
 FILL QUANTITY INCLUDES
 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT
 (6") Topsoil Stripping = 1,750 Cu. Yds.
 (New Construction Only)
 Remaining Location = 15,140 Cu. Yds.
TOTAL CUT = 16,890 CU.YDS.
FILL = 580 CU.YDS.

EXCESS MATERIAL = 16,310 Cu. Yds.
 Topsoil & Pit Backfill = 6,450 Cu. Yds.
 (1/2 Pit Vol.)
 EXCESS UNBALANCE = 9,860 Cu. Yds.
 (After Interim Rehabilitation)

R 21
E R 22
E

OURAY

T 8 S
T 9 S

PROPOSED LOCATION:
NBU #921-27C2AS, #921-27D2AS,
#921-27C2D & #921-27D2DS

T 9 S
T 10 S

5.0 MI. +/-

2.0 MI. +/-

SEE TOPO "B"

BITTER CREEK GAS FIELD

LEGEND:
● PROPOSED LOCATION

Kerr-McGee Oil & Gas Onshore LP

NBU #921-27C2AS, #921-27D2AS,
#921-27C2D & #921-27D2DS
SECTION 27, T9S, R21E, S.L.B.&M.
NE 1/4 NW 1/4

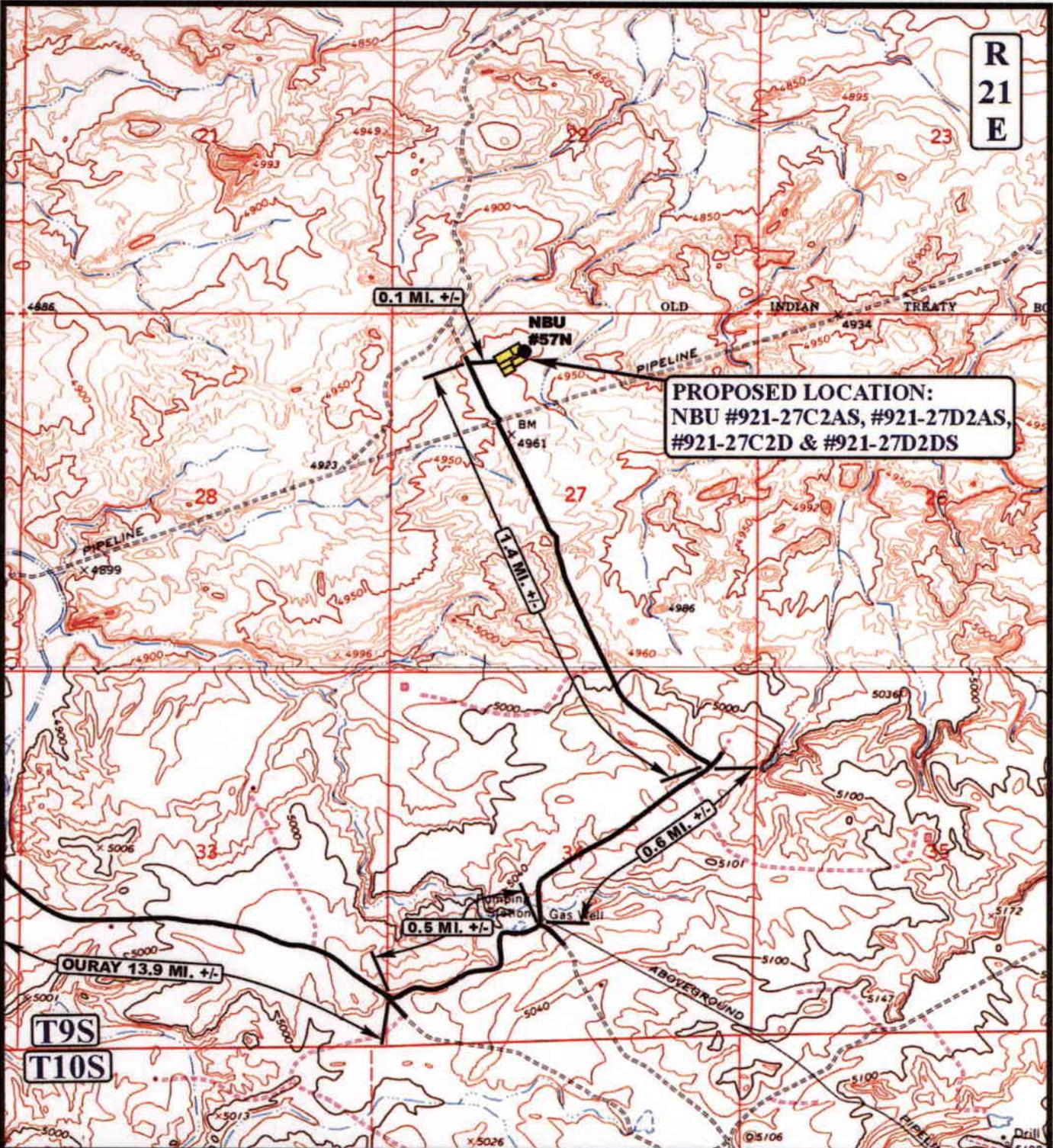
UEIS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP 05 29 08
MONTH DAY YEAR
SCALE: 1:100,000 DRAWN BY: Z.L. REVISED: 00-00-00

A
TOPO

R
21
E



LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD



Kerr-McGee Oil & Gas Onshore LP

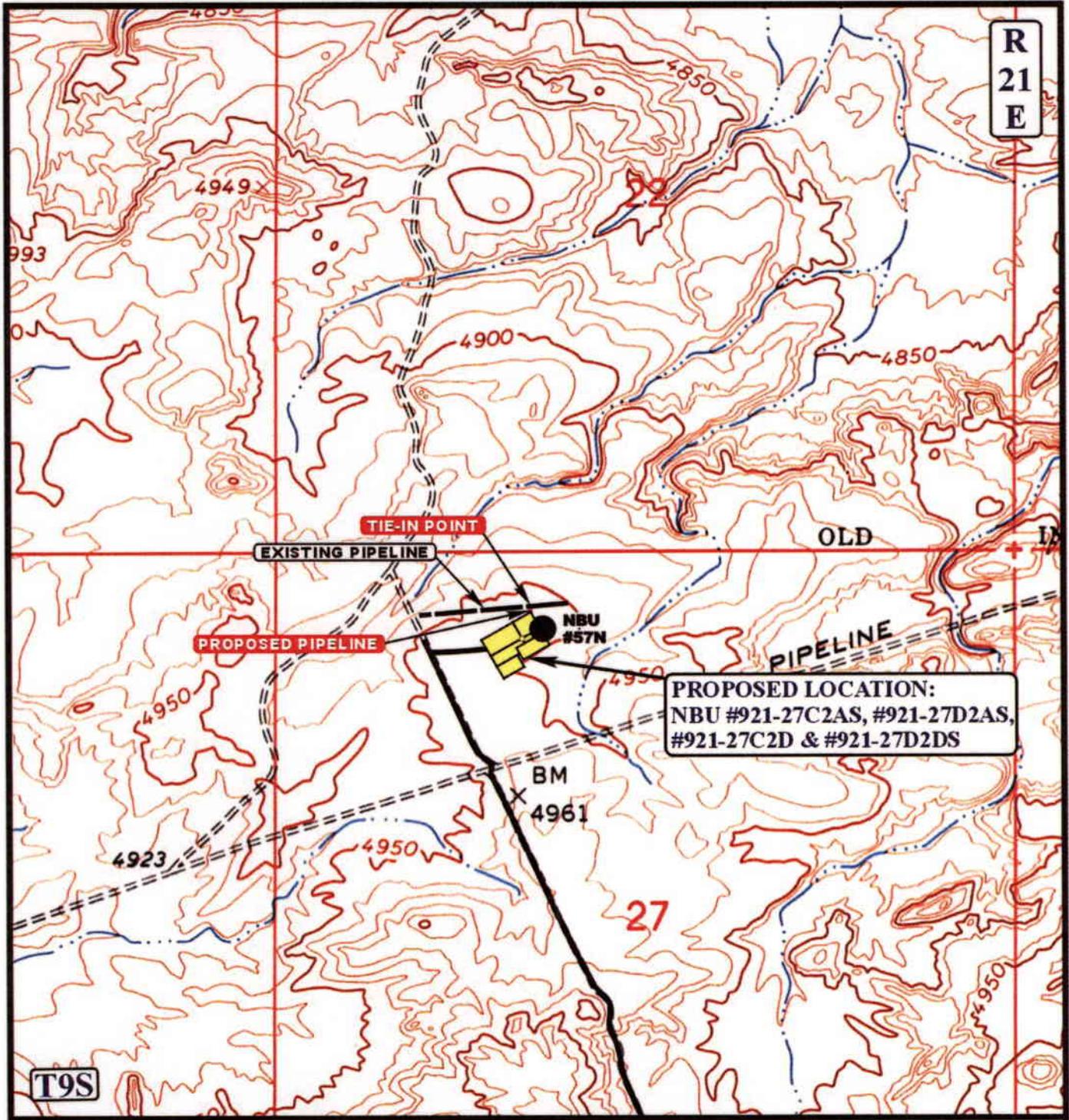
NBU #921-27C2AS, #921-27D2AS,
 #921-27C2D & #921-27D2DS
 SECTION 27, T9S, R21E, S.L.B.&M.
 NE 1/4 NW 1/4



Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP 05 29 08
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 30' +/-

LEGEND:

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD

Kerr-McGee Oil & Gas Onshore LP

NBU #921-27C2AS, #921-27D2AS,
 #921-27C2D & #921-27D2DS
 SECTION 27, T9S, R21E, S.L.B.&M.
 NE 1/4 NW 1/4

U&L S Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP 05 29 08
 MONTH DAY YEAR
 SCALE: 1" = 1000' DRAWN BY: Z.L. REVISED: 00-00-00

D
 TOPO

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 07/10/2008

API NO. ASSIGNED: 43-047-40227

WELL NAME: NBU 921-27C2D
 OPERATOR: KERR-MCGEE OIL & GAS (N2995)
 CONTACT: KEVIN MCINTYRE

PHONE NUMBER: 720-929-6226

PROPOSED LOCATION:

NENW 27 090S 210E
 SURFACE: 0650 FNL 1730 FWL
 BOTTOM: 0650 FNL 1730 FWL
 COUNTY: UINTAH
 LATITUDE: 40.01250 LONGITUDE: -109.5404
 UTM SURF EASTINGS: 624577 NORTHINGS: 4429954
 FIELD NAME: NATURAL BUTTES (630)

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DVW	8/28/08
Geology		
Surface		

LEASE TYPE: 3 - State
 LEASE NUMBER: ST UO 1194A
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]
(No. 22013542)
- N Potash (Y/N)
- Y Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit
(No. 43-8496)
- N RDCC Review (Y/N)
(Date: _____)
- N/A Fee Surf Agreement (Y/N)
- N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General
Siting: 460' From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
Board Cause No: 173-14
Eff Date: 12-2-1999
Siting: 460' fr u.s. drg & uncomm. Tract
- R649-3-11. Directional Drill

COMMENTS:

Needs Permit (06-18-05)

STIPULATIONS:

- 1 - STATEMENT OF BASIS
- 2 - OIL SHALE
- 3 - Surface (sg Cont Sta A)

Application for Permit to Drill

Statement of Basis

8/12/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
876	43-047-40227-00-00		GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 921-27C2D	Unit	NATURAL BUTTES		
Field	NATURAL BUTTES		Type of Work		
Location	NENW 27 9S 21E S 650 FNL 1730 FWL GPS Coord (UTM) 624577E 4429954N				

Geologic Statement of Basis

Kerr McGee proposes to set 2,400' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 2,000'. A search of Division of Water Rights records shows one water wells within a 10,000 foot radius of the center of Section 27. The well is listed as 200 feet deep and used for drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect. Any usable ground water.

Brad Hill
APD Evaluator

8/11/2008
Date / Time

Surface Statement of Basis

This location is in the Natural Buttes Unit approximately 16.9 road miles southeast of Ouray, Ut.. It is accessed by the Seep Ridge Road to the Uintah County Middle Road then by existing or planned oil field development roads to within 0.1 mile of the site, which will require new construction.

The general area is within a long unnamed wash immediately east of Cottonwood Wash. Both washes enter the White River in the same general area, approximately six miles below the site. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws that drain northerly. This unnamed wash is an ephemeral drainage. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. The washes are sometimes rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

Four gas wells are proposed on this pad. The location is in a relatively flat or slightly rolling area. Topography has a gentle slope to the north with the drainage entering a swale to the south. A portion of the pad will be on an existing location with the wellhead beyond the proposed new disturbance. Two reserve pits were requested. One pit would be used for drilling fluids during the drilling operation and the second for completion fluids. The second pit is not approved with this permit. Kerr McGee was informed they would have to submit a separate application and plan for this pit. No diversions are needed. The selected site has no apparent concerns for constructing a pad, drilling and operating the planned wells and is the best location in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA reviewed the site and had no concerns regarding the proposal.

Ben Williams of the Utah Division of Wildlife Resources was invited the pre-site visit and did not attend

Floyd Bartlett
Onsite Evaluator

6/18/2008
Date / Time

Application for Permit to Drill

Statement of Basis

8/12/2008

Utah Division of Oil, Gas and Mining

Page 2

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 921-27C2D
API Number 43-047-40227-0 **APD No** 876 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 NENW **Sec** 27 **Tw** 9S **Rng** 21E 650 FNL 1730 FWL
GPS Coord (UTM) **Surface Owner**

Participants

Floyd Bartlett and David Hackford (DOG M), Jim Davis (SITLA), Raleen White, Kevin McIntyre, Clay Einerson and Tony Kzneck (Kerr McGee) and David Kay (Uintah Engineering and Land Surveying).

Regional/Local Setting & Topography

This location is in the Natural Buttes Unit approximately 16.9 road miles southeast of Ouray, Ut.. It is accessed by the Seep Ridge Road to the Uintah County Middle Road then by existing or planned oil field development roads to within 0.1 mile of the site, which will require new construction.

The general area is within a long unnamed wash immediately east of Cottonwood Wash. Both washes enter the White River in the same general area, approximately six miles below the site. The area is characterized by rolling hills, which are frequently divided by somewhat gentle draws that drain northerly. This unnamed wash is an ephemeral drainage. No springs, seeps or streams exist in the area. An occasional pond constructed to supply water for cattle and antelope exists. The washes are sometimes rimmed with steep side hills, which have exposed sand stone bedrock cliffs along the rims.

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Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing
Recreational
Wildlife Habitat

New Road

Miles	Well Pad	Src Const Material	Surface Formation
0.1	Width 290 Length 350	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Vegetation is a salt desert shrub type. Principal species present are cheatgrass, prickly pear, horsebrush, greasewood,

globemallow, wild onion, snagscale, Indian ricegrass, Russian thistle, halogelton, pepper grass and curly mesquite grass.

Cattle, antelope and small mammals and birds.

Soil Type and Characteristics

Soils are a shallow sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Paleo Potential Observed? Cultural Survey Run? Cultural Resources?

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	<300	20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)	<10	0	
Affected Populations	<10	0	
Presence Nearby Utility Conduits	Not Present	0	
		Final Score	Sensitivity Level
		35	

Characteristics / Requirements

The reserve pit is planned in an area of cut in the northeast corner of the location. Dimensions are 100' x 220' x 10' deep with 2' of freeboard. A liner with a minimum thickness of 16 mils. and a felt sub-liner are required.

Closed Loop Mud Required? Y Liner Required? Y Liner Thickness 16 Pit Underlayment Required? N

Other Observations / Comments

Floyd Bartlett
Evaluator

6/18/2008
Date / Time

Casing Schematic

Surface

12%
15%

TOC @ 0.

Uinta

TOC @ 510. → to surf w/ 8%, tail 1927' ✓
* STIP ✓

1567' Green River

1880' Bird's Nest

2000' + BMSW

2032' tail

2392' Mahogany

Surface 2400. MD

9-5/8"
MW 8.3
Frac 19.3

3472' tail

✓

4891' Wasatch

Slip surf. cont. ✓

7789' Mesaverde

8731' MV u2

9325' MV L1

4-1/2"
MW 11.8

Production 9900. MD

Well name:

43047402270000 NBU 921-27C2D

Operator: Kerr McGee Oil & Gas Onshore L.P.

String type: Surface

Project ID:

43-047-40227-0000

Location: Uintah County, Utah

Design parameters:

Collapse

Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 2,112 psi
Internal gradient: 0.120 psi/ft
Calculated BHP: 2,400 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 2,104 ft

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 109 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,300 ft

Cement top: 510 ft

Completion type is subs
Non-directional string.

Re subsequent strings:

Next setting depth: 9,900 ft
Next mud weight: 11.800 ppg
Next setting BHP: 6,069 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,400 ft
Injection pressure: 2,400 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2400	9.625	36.00	J-55	LT&C	2400	2400	8.796	1041.7
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	1039	2020	1.945	2400	3520	1.47	76	453	5.98 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Minerals

Phone: (801) 538-5357
FAX: (801) 359-3940

Date: August 19, 2008
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2400 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:

43047402270000 NBU 921-27C2D

Operator: Kerr McGee Oil & Gas Onshore L.P.

String type: Production

Project ID:

43-047-40227-0000

Location: Uintah County, Utah

Design parameters:

Collapse

Mud weight: 11.800 ppg
Internal fluid density: 2.300 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 214 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Burst

Max anticipated surface pressure: 3,891 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 6,069 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Completion type is subs
Non-directional string.

Tension is based on buoyed weight.
Neutral point: 8,154 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft ³)
1	9900	4.5	11.60	I-80	LT&C	9900	9900	3.875	863.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4886	6360	1.302	6069	7780	1.28	95	212	2.24 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Minerals

Phone: (801) 538-5357
FAX: (801) 359-3940

Date: August 18, 2008
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9900 ft, a mud weight of 11.8 ppg. An internal gradient of .119 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

BOPE REVIEW

Kerr-McGee NBU 921-27C2D API 43-047-40227-0000

INPUT

Well Name	Kerr-McGee NBU 921-27C2D API 43-047-40227-0000		
Casing Size (")	String 1	String 2	
Setting Depth (TVD)	9 5/8	4 1/2	
Previous Shoe Setting Depth (TVD)	2400	9900	
Max Mud Weight (ppg)	20	2400	
BOPE Proposed (psi)	8.4	11.8	✓
Casing Internal Yield (psi)	500	5000	
Operators Max Anticipated Pressure (psi)	3520	7780	
	6138	11.9 ppg	✓

Calculations	String 1	9 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	1048	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	760	NO <i>ok</i> Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	520	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	525	← NO <i>No expected pressure Birds Nest LC possible</i>
Required Casing/BOPE Test Pressure		2400 psi	
*Max Pressure Allowed @ Previous Casing Shoe =		20 psi	*Assumes 1psi/ft frac gradient

Calculations	String 2	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	6075	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	4887	YES ✓
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3897	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	4425	← NO <i>Reasonable</i>
Required Casing/BOPE Test Pressure		5000 psi	
*Max Pressure Allowed @ Previous Casing Shoe =		2400 psi	*Assumes 1psi/ft frac gradient

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

July 15, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2008 Plan of Development Natural Buttes Unit
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
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(Proposed PZ Wasatch/MesaVerde)

43-047-40184	NBU 921-30FT	Sec 30 T09S R21E 1585 FNL 2614 FWL
43-047-40185	NBU 921-31BT	Sec 31 T09S R21E 0670 FNL 2008 FEL
43-047-40170	NBU 921-27KT	Sec 27 T09S R21E 1527 FSL 1821 FWL
43-047-40171	NBU 921-27MT	Sec 27 T09S R21E 0634 FSL 0931 FWL
43-047-40172	NBU 921-27OT	Sec 27 T09S R21E 0646 FSL 2211 FEL
43-047-40173	NBU 921-27HT	Sec 27 T09S R21E 2025 FNL 0623 FEL
43-047-40174	NBU 921-27LT	Sec 27 T09S R21E 1954 FSL 0641 FWL
43-047-40175	NBU 921-33K	Sec 33 T09S R21E 2066 FSL 1926 FWL
43-047-40227	NBU 921-27C2D	Sec 27 T09S R21E 0650 FNL 1730 FWL
43-047-40203	NBU 921-27D2DS	Sec 27 T09S R21E 0660 FNL 1713 FWL
	BHL	Sec 27 T09S R21E 0395 FNL 0350 FWL
43-047-40202	NBU 921-27D2AS	Sec 27 T09S R21E 0640 FNL 1747 FWL
	BHL	Sec 27 T09S R21E 0050 FNL 0350 FWL
43-047-40201	NBU 921-27C2AS	Sec 27 T09S R21E 0630 FNL 1765 FWL
	BHL	Sec 27 T09S R21E 0300 FNL 1730 FWL
43-047-40169	NBU 921-26IT	Sec 26 T09S R21E 1964 FSL 0674 FEL
43-047-40176	NBU 922-29NT	Sec 29 T09S R22E 0845 FSL 1627 FWL
43-047-40177	NBU 922-29KT	Sec 29 T09S R22E 1795 FSL 1936 FWL
43-047-40178	NBU 922-31BT	Sec 31 T09S R22E 0888 FNL 2191 FEL

43-047-40179	NBU 922-32ET	Sec 32	T09S	R22E	2477	FNL	0094	FWL
43-047-40186	NBU 922-33OT	Sec 33	T09S	R22E	0692	FSL	1465	FEL
43-047-40187	NBU 922-33NT	Sec 33	T09S	R22E	0890	FSL	2291	FWL
43-047-40188	NBU 922-33IT	Sec 33	T09S	R22E	2115	FSL	0579	FEL
43-047-40191	NBU 1022-04GT	Sec 04	T10S	R22E	1897	FNL	1861	FEL
43-047-40189	NBU 922-35IT	Sec 35	T09S	R22E	2133	FSL	0627	FEL
43-047-40190	NBU 1022-01CT	Sec 01	T10S	R22E	0819	FNL	2106	FWL
43-047-40192	NBU 1022-08IT	Sec 08	T10S	R22E	1757	FSL	0323	FEL
43-047-40193	NBU 1022-08GT	Sec 08	T10S	R22E	2313	FNL	1922	FEL
43-047-40194	NBU 1022-09AT	Sec 09	T10S	R22E	0472	FNL	0582	FEL
43-047-40195	NBU 1022-10HT	Sec 10	T10S	R22E	1798	FNL	0297	FEL
43-047-40196	NBU 1022-10FT	Sec 10	T10S	R22E	2200	FNL	2094	FWL
43-047-40204	NBU 1022-32D1S	Sec 32	T10S	R22E	0205	FNL	2058	FWL
	BHL	Sec 32	T10S	R22E	0270	FNL	1310	FWL
43-047-40205	NBU 1022-32D4AS	Sec 32	T10S	R22E	0198	FNL	2077	FWL
	BHL	Sec 32	T10S	R22E	0760	FNL	1180	FWL
43-047-40206	NBU 1022-32B3S	Sec 32	T10S	R22E	0185	FNL	2114	FWL
	BHL	Sec 32	T10S	R22E	1150	FNL	2130	FEL
43-047-40207	NBU 1022-32D4DS	Sec 32	T10S	R22E	0192	FNL	2096	FWL
	BHL	Sec 32	T10S	R22E	1240	FNL	1050	FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:7-15-08

From: Jim Davis
To: Bonner, Ed; Mason, Diana
Date: 10/23/2008 7:39 AM
Subject: The following wells have been approved by SITLA including arch and paleo clearance.

The following wells have been approved by SITLA including arch and paleo clearance.

Kerr-McGee's NBU 921-27C2AS [API #4304740201]
Kerr-McGee's NBU 921-27D2AS [API #4304740202]
Kerr-McGee's NBU 921-27D2DS [API #4304740203]
Kerr-McGee's NBU 921-27C2D [API #4304740227]

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

November 4, 2008

Kerr-McGee Oil & Gas Onshore, LP
1099 18th St., #1200
Denver, CO 80202

Re: NBU 921-27C2D Well, 650' FNL, 1730' FWL, NE NW, Sec. 27, T. 9 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40227.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
Bureau of Land Management, Vernal Field Office
SITLA



Operator: Kerr-McGee Oil & Gas Onshore, LP
Well Name & Number NBU 921-27C2D
API Number: 43-047-40227
Lease: ST UO 1194A

Location: NE NW Sec. 27 T. 9 South R. 21 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2

43-047-40227

November 4, 2008

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
7. Surface casing shall be cemented to the surface.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: KERR-McGEE OIL & GAS ONSHORE, L.P.

Well Name: NBU 921-27C2D

Api No: 43-047-40227 Lease Type: STATE

Section 27 Township 09S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

SPUDDED:

Date 01/08/2009

Time 4:00 PM

How DRY

Drilling will Commence: _____

Reported by LEW WELDON

Telephone # (435) 828-7035

Date 01/08/2009 Signed CHD

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
 Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304740203	NBU 921-27D2DS		NENW	27	9S,	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	1/9/2009		<u>1/15/09</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>W57MVD</u> SPUD WELL LOCATION ON 01/09/2009 AT 1030 HRS <u>BHL = NWNW</u>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304740227	NBU 921-27C2D		NENW	27	9S,	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	1/8/2009		<u>1/15/09</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>W57MVD</u> SPUD WELL LOCATION ON 01/08/2009 AT 1600 HRS.							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304740202	NBU 921-27D2AS		NENW	27	9S,	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	1/8/2009		<u>1/15/09</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>W57MVD</u> SPUD WELL LOCATION ON 01/08/2009 AT 1500 HRS. <u>BHL = NWNW</u>							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO

Name (Please Print)

Signature

REGULATORY ANALYST

Title

1/9/2009

Date

RECEIVED

JAN 12 2009

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

		5. LEASE DESIGNATION AND SERIAL NUMBER: ST UO-01194A
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: NBU 921-27C2D
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP		9. API NUMBER: 4304740227
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078		10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 650'FNL, 1730'FWL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 27 9S, 21E		STATE: UTAH

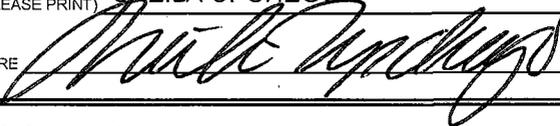
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>WELL SPUD</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 01/08/2009 AT 1600 HRS.

NAME (PLEASE PRINT) SHEILA UPCHEGO	TITLE REGULATORY ANALYST
SIGNATURE 	DATE 1/9/2009

(This space for State use only)

RECEIVED
JAN 12 2009

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: ST UO-01194A
2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078		7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
4. LOCATION OF WELL FOOTAGES AT SURFACE: 650'FNL, 1730'FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 27 9S, 21E		8. WELL NAME and NUMBER: NBU 921-27C2D
PHONE NUMBER: (435) 781-7024		9. API NUMBER: 4304740227
		10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
		COUNTY: UINTAH
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: SET SURFACE CSG
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PROPETRO AIR RIG ON 01/24/2009. DRILLED 12 1/4" SURFACE HOLE TO 2550'. RAN 9 5/8" 36# J-55 SURFACE CSG. LEAD CMT W/240 SX HIFILL CLASS G @11.0 PPG 3.82 YIELD. TAILED CMT W/200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. 5 GAL/SK OF PREM CMT TAIL 650 PSI BUMP PLUG 1100 PSI FLOAT HELD 25 BBLS CMT TO SURFACE. RAN 200' OF 1" PIPE CMT W/150 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN 1" PIPE AND FELL BACK. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DOWN BACKSIDE GOOD CMT TO SURFACE HOLE STAYED FULL.

WORT.

NAME (PLEASE PRINT) SHEILA UPCHEGO	TITLE REGULATORY ANALYST
SIGNATURE 	DATE 2/4/2009

(This space for State use only)

RECEIVED
FEB 09 2009

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS			5. LEASE DESIGNATION AND SERIAL NUMBER: ST UO-01194A
			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____			8. WELL NAME and NUMBER: NBU 921-27C2D
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP			9. API NUMBER: 4304740227
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078		PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 650'FNL, 1730'FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 27 9S, 21E			STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>FINAL DRILLING OPERATIONS</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2550' TO 10,165' ON 03/24/2009. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/510 SX ECONOCEM CMT @11.6 PPG 2.61 YIELD. TAILED CMT W/1630 SX 50/50 POZ @14.3 PPG 1.25 YIELD. WATER RATION 5.41 GALLONS PER SK DROPPED PLUG AND WENT TO DISPLACE COULD NOT BRING ON WATER TO TANKS HOOK UP LINES TO RIG SYSTEM AND DISPLACE W/157 BBLs DIRTY WATER DID NOT BUMP PLUG HELD PRESSURE FOR 5 MIN AND BLEED BACK FLOATS HELD STOPPED PUMPING. LIFT PRESSURE 2200 PSI AT 1 BPM FULL RETURNS THROUGH OUT JOB AND CIRC 45 BBLs CMT TO SURFACE PULL LANDING JT SET PACK OFF AND PRESSURE TEST TO 5000 PSI FOR 15 MIN NIPPLE DOWN BOPE AND FLOW LINES RD MOVE CATWALK AND CLEAN MUD TANKS.

RELEASED ENSIGN RIG 139 ON 03/25/2009 AT 1700 HRS.

NAME (PLEASE PRINT) <u>SHEILA UPCHEGO</u>	TITLE <u>REGULATORY ANALYST</u>
SIGNATURE	DATE <u>3/30/2009</u>

(This space for State use only)

RECEIVED
APR 20 2009
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>COMPLETION PIT</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: ST UO-01194
2. NAME OF OPERATOR: KERR-McGEE OIL & GAS ONSHORE LP		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST VERNAL UT 84078		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: (435) 781-7024		8. WELL NAME and NUMBER MULTIPLE <u>NBU 921-27C2D</u>
4. LOCATION OF WELL FOOTAGES AT SURFACE:		9. API NUMBER: MULTIPLE <u>43 0A7 40227</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>NW/4 27 9S 21E</u>		10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
COUNTY: UINTAH		
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>COMPLETION PIT</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

KERR MCGEE OIL AND GAS ONSHORE LP REQUESTS TO UTILIZE A 2ND PIT (COMPLETION PIT) ON THE MULTI-WELL PAD FOR NBU 921-27C2AS, 27C2D, 27D2AS & 27D2DS. THE NEED TO UTILIZE THE COMPLETION PIT IS DUE TO THE INCREASE VOLUME OF COMPLETION FLUIDS DURING FRAC OPERATIONS. THE COMPLETION PIT WILL BE LINED ACCORDING TO THE CONDITIONS OF APPROVAL STATED IN THE APPROVED APDS. AT THIS TIME KERR MCGEE ALSO REQUESTS TO DEEPEN THE PIT TO 12' INSTEAD OF 6' AS STATED IN THE LAYOUT DIAGRAM.

THE EXISTING PIT THAT CONTAINS THE DRILLING MUD WILL ALSO NEED TO BE CLEANED OUT AND RE-LINED FOR SUFFICIENT CAPACITY AND TO INSURE THE INTEGRITY OF THE LINER. THE DRILLING MUD WILL BE MIXED WITH THE SPOIL PILE AS IF THE PIT WAS BEING RECLAIMED. ONCE THE PITS ARE RECLAIMED THE RECLAMATION PROCESS APPROVED IN THE APD WILL BE FOLLOWED.

Approved by the
**Utah Division of
Oil, Gas and Mining**

PLEASE SEE ATTACHED LAYOUT DIAGRAM

All Fluids shall
be removed from
pits after
flowback. *BT*

Date: 04-30-09
By: [Signature]

NAME (PLEASE PRINT) <u>RAMEY HOOPES</u>	TITLE <u>REGULATORY ANALYST</u>
SIGNATURE <u>[Signature]</u>	DATE <u>4/24/2009</u>

(This space for State use only)

COPY SENT TO OPERATOR

Date: 5.4.2009

Initials: KS

(5/2000)

(See Instructions on Reverse Side)

RECEIVED

APR 28 2009

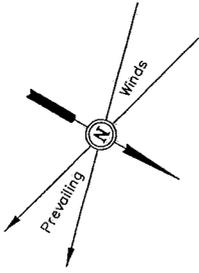
DIV. OF OIL, GAS & MINING

Kerr-McGee Oil & Gas Onshore LP

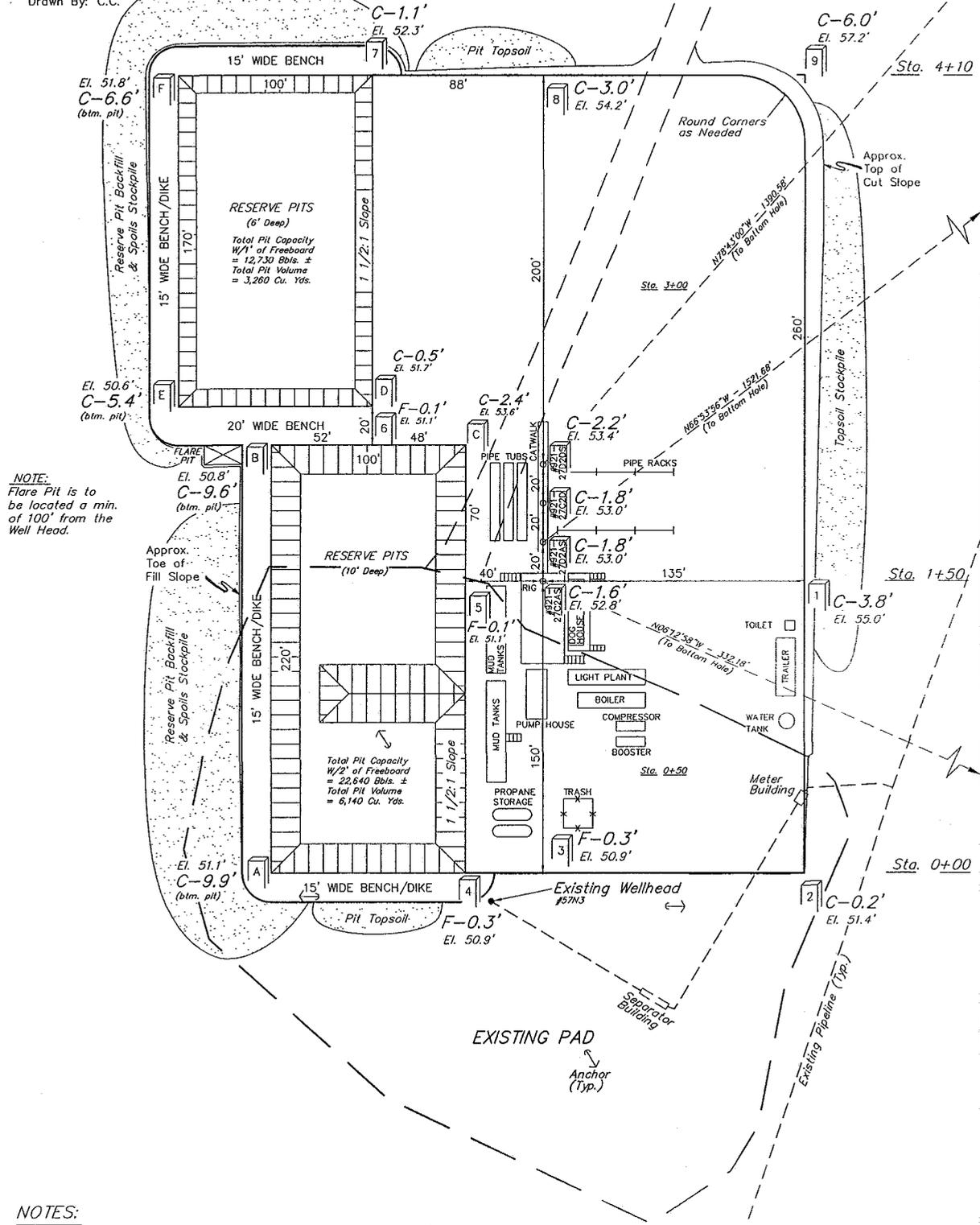
SITE PLAN LAYOUT FOR

NBU #921-27C2AS, #921-27D2AS,
 #921-27C2D & #921-27D2DS
 SECTION 27, T9S, R21E, S.L.B.&M.
 NE 1/4 NW 1/4

FIGURE #1



SCALE: 1" = 50'
 DATE: 05-29-08
 Drawn By: C.C.



NOTE:
 Flare Pit is to be located a min. of 100' from the Well Head.

NOTES:
 Elev. Ungraded Ground At #921-27C2AS Loc. Stake = 4952.8'
 FINISHED GRADE ELEV. AT #921-27C2AS LOC. STAKE = 4951.2'

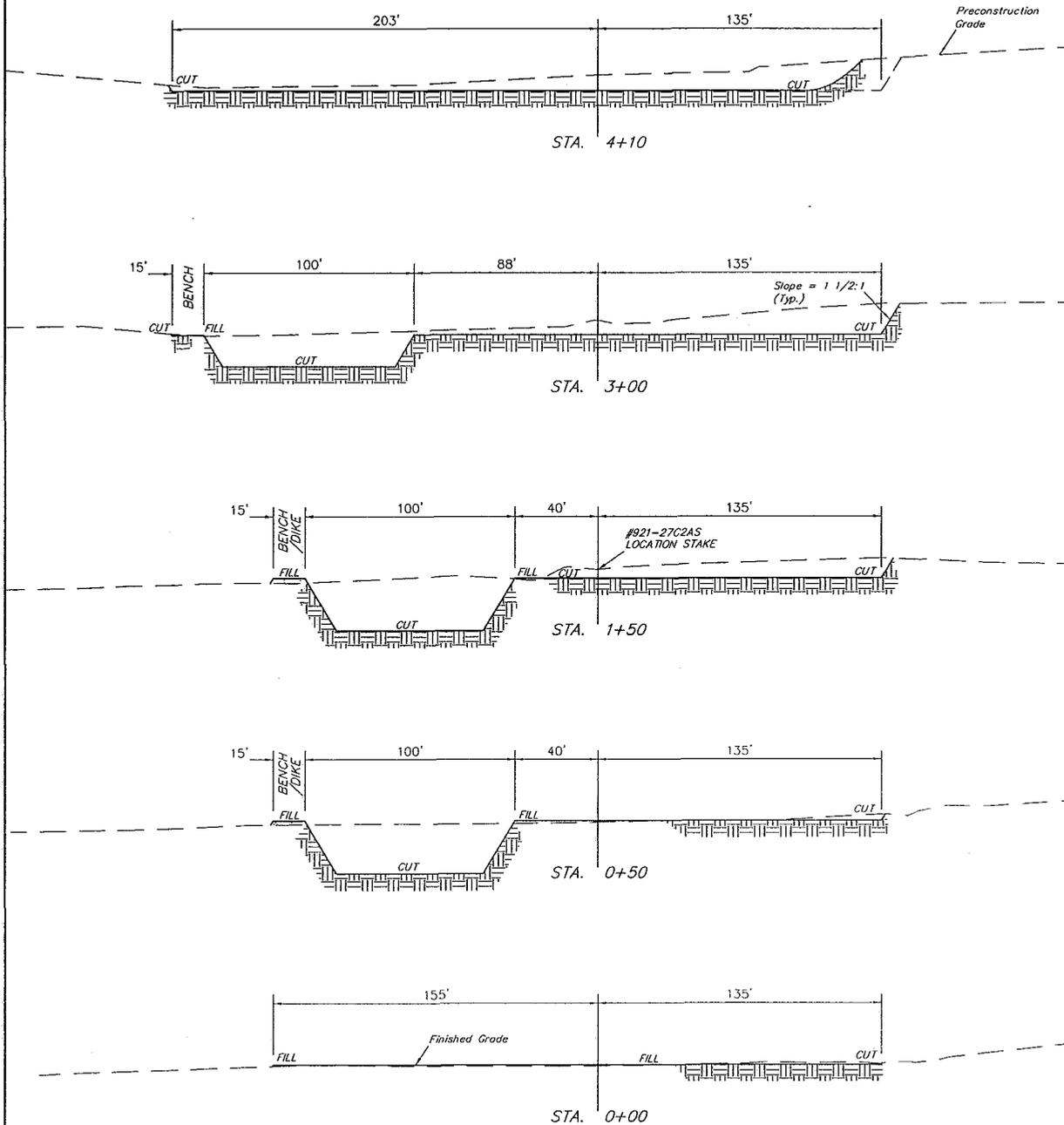
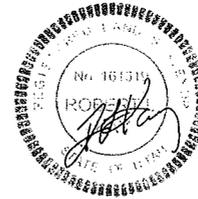
Kerr-McGee Oil & Gas Onshore LP

TYPICAL CROSS SECTIONS FOR

NBU #921-27C2AS, #921-27D2AS,
 #921-27C2D & #921-27D2DS
 SECTION 27, T9S, R21E, S.L.B.&M.
 NE 1/4 NW 1/4

FIGURE #2

1" = 20'
 X-Section
 Scale
 1" = 50'
 DATE: 05-29-08
 Drawn By: C.C.



NOTE:
 Topsoil should not be Stripped Below Finished Grade on Substructure Area.

* NOTE:
 FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,750 Cu. Yds.
(New Construction Only)	
Remaining Location	= 15,140 Cu. Yds.
TOTAL CUT	= 16,890 CU.YDS.
FILL	= 580 CU.YDS.

EXCESS MATERIAL	= 16,310 Cu. Yds.
Topsoil & Pit Backfill	= 6,450 Cu. Yds.
(1/2 Pit Vol.)	
EXCESS UNBALANCE	= 9,860 Cu. Yds.
(After Interim Rehabilitation)	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ST UO 1194A
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-27C2D
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047402270000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6587 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0650 FNL 1730 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 27 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/7/2009	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON
 06/06/2009 AT 12:30 PM. PLEASE REFER TO THE ATTACHED
 CHRONOLOGICAL WELL HISTORY.

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 June 11, 2009

NAME (PLEASE PRINT) Sheila Upchego	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 6/11/2009	

ROCKIES
Operation Summary Report

Well: NBU 921-27C2D [YELLOW] Spud Conductor: 1/8/2009 Spud Date: 1/24/2009
 Project: UTAH Site: UINTAH Rig Name No: ENSIGN 139/139, PROPETRO/
 Event: DRILLING Start Date: 1/24/2009 End Date: 3/25/2009
 Active Datum: RKB @4,966.50ft (above Mean Sea Level) UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
1/24/2009	13:30 - 0:00	10.50	DRLSUR	02		P		AIR SPUD 13:30 1/24/2009 DRILL FROM 40' TO 780'. W/ AIR HAMMER
1/25/2009	0:00 - 12:00	12.00	DRLSUR	02		P		DRILL F/ 780' TO 1410' W/ HAMMER BIT, NO WATER
	12:00 - 0:00	12.00	DRLSUR	02		P		DRILL F/ 1410' TO 1890' TFB@ 1470', DRILLING W/ AIR. SURVEY 1470'= 1/2 DEGREE.
1/26/2009	0:00 - 12:00	12.00	DRLSUR	02		P		DRILL F/ 1590' TO 1890'. W/ AIR. NO WATER.
	12:00 - 0:00	12.00	DRLSUR	02		P		DRILL F/ 1890' TO 2220'. W/ AIR. NO WATER.
1/27/2009	0:00 - 13:00	13.00	DRLSUR	02		P		DRILL F/ 2250' TO 2550' W/ AIR (NO WATER).
	13:00 - 18:00	5.00	DRLSUR	05		P		CLEAN HOLE, RUN SURVEY 2500'= 1.5 DEGREES. LAY DOWN DRILL STRING
	18:00 - 22:00	4.00	CSG	11		P		RUN 60 JTS 9-5/8" 36# J-55 CSG TO 2521'. FLOAT COLLAR @ 1959'.
	22:00 - 0:00	2.00	CSG	15		P		PUMP 240 SX (163.2 BBLS) OF 11# , 3.82 YD, 23 GAL/SK HI FILL LEAD. PUMP 200 SX (41 BBLS) OF 15.8 #, 1.15YD, 5 GAL/SK OF PREM. CEM. TAIL. LIFT 650 PSI BUMP PLUG 1100 PSI, FLOAT HELD 25 BBLS CEMENT TO SURFACE. CONTINUE NEXT DAY.
1/28/2009	0:00 - 2:30	2.50	CSG	15		P		TOP OUT #1 PUMP 150 SX (30.7 BBLS) OF 15.8# ,1.15YD, 5 GAL/SK DOWN 1" PIPE, FILL GOOD CEMENT TO SURFACE. CEMENT FELL. WAIT.
	2:30 - 3:30	1.00	CSG	15		P		TOP OUT #2 PUMP 100 SX (20.4 BBLS) OF 15.8# ,1.15YD, 5 GAL/SK DOWN BACK SIDE , CEMENT TO SURFACE AND STAYED
3/15/2009	13:00 - 14:30	1.50	RDMO	01	E	P		RDRT
	14:30 - 18:00	3.50	RDMO	01	C	P		SKID RIG 40' TO NBU - 921-27C2D
	18:00 - 21:00	3.00	RDMO	13	A	P		RURT - N/UP BOP, ROTATING HEAD & FLOW LINE
	21:00 - 0:00	3.00	RDMO	13	C	P		TEST BOP - IBOP, LOWER KELLY VALVE, RAMS, CHOKE LINE/CHOKE, FLOOR VALVES 250 LOW 5000 HIGH, ANNULAR 250 LOW 2500 HIGH, CASING 1500
3/16/2009	0:00 - 2:00	2.00	DRLPRO	13	C	P		TEST BOP
	2:00 - 8:30	6.50	DRLPRO	05	A	P		P/UP BIT & MM - P/UP DIRECTIONAL TOOLS & CALIBRATE - CONTINUE RIH TO 2359'
	8:30 - 10:00	1.50	DRLPRO	06	B	P		LEVEL DERRICK, INSTALL ROTATING HEAD, CHECK SURFACE EQUIPMENT F/LEAKS
	10:00 - 12:00	2.00	DRLPRO	02	F	P		DRILL CMT, FE & RATHOLE TO 2564'
	12:00 - 16:30	4.50	DRLPRO	02	D	P		DRILL F/2564' TO 2952' (388' @ 86.2fph) MW 8.4, VIS 27, WOB 12, RPM 45/50, MM RPM 62, GPM 440 SLIDE 2790-2805, 2874-2890 DIFF 100
	16:30 - 17:00	0.50	DRLPRO	06	A	P		RIG SER
	17:00 - 20:00	3.00	DRLPRO	02	D	P		DRILL F/2952' TO 3226' (274' @ 91.3fph) MW 8.4, VIS 27, WOB 12/15, RPM 50/55, MM RPM 65, GPM 468, TQ 4000/5000, SLIDE 3043-3068
	20:00 - 21:00	1.00	DRLPRO	07	B	P		LOST 25% ROTARY & TORQUE LIMITS ON TOP DRIVE, REPLACE PLC CARD IN DELTA MODULE FOR TOP DRIVE - REPLACING PLC CARD DID NOT FIX PROBLEM - SWAPPED DELTA
	21:00 - 0:00	3.00	DRLPRO	02	D	P		MODULES FROM PUMP #1 AND TOP DRIVE - TOP DRIVE SYSTEMS 100% - PUMP #1 LIMITED TO 90 SPM
								DRILL F/3226' TO 3500' (274' @ 91.3fph) MW 8.4, VIS 27, WOB 12/15, RPM 50/55, MM RPM 65, GPM 468

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]		Spud Conductor: 1/8/2009		Spud Date: 1/24/2009	
Project: UTAH		Site: UINTAH		Rig Name No: ENSIGN 139/139, PROPETRO/	
Event: DRILLING		Start Date: 1/24/2009		End Date: 3/25/2009	
Active Datum: RKB @4,966.50ft (above Mean Sea Level)			UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation																					
3/17/2009	0:00 - 9:00	9.00	DRLPRO	02	D	P		DRILL F/3500' TO 4405' (905' @ 100.6fph) MW 8.4, VIS 26, WOB 12/15, RPM 45, MM RPM 65, GPM 468, TQ 5/6K SLIDE 3495-3520, 4038-4078, 4219-4244, 4310-4330, 4400-4425, DIFF 150 RIG SER																					
	9:00 - 9:30	0.50	DRLPRO	06	A	P																							
	9:30 - 20:00	10.50	DRLPRO	02	D	P		DRILL/SLIDE F/4405' TO 5305' (900' @ 85.7fph) MW 8.3, VIS 26, WOB 12/15, RPM 50, MM RPM 70, TQ 5/6K, GPM 500 SLIDE 4491-4511, 4581-4600, 4672-4692, 4762-4782, 4853-4873, 4943-4963, 5214-5234, DIFF 150/175																					
	20:00 - 21:00	1.00	DRLPRO	07	B	P		RECEIVED & INSTALLED DELTA MODULE F/PUMP- UNABLE TO COMPLETE INSTALLATION - METRIC NUTS TO CONNECT POWER SUPPLY TO MODULE MISSING																					
	21:00 - 0:00	3.00	DRLPRO	02	D	P		DRILL/SLIDE F/5305' TO 5666' (361' @ 120.3fph) MW 8.4, VIS 26, WOB 12/15, RPM 45, MM RPM 65, TQ 6K, GPM 468, SPP/1650/1500																					
3/18/2009	0:00 - 13:00	13.00	DRLPRO	02	D	P		Drill 5,666' - 6,843', WOB 12-14K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 500, RPM 55, Motor RPM 70, SPP on/off Bottom 1650/1450, Torque On/Off Bottom 5/8, Mud wt 8.4, Viscosity 26, Footage 1177, FPH 90.5, Started mudding up at 6,800' Slide Parameters: Depths, (5,847' - 5,862'), (6,119' - 6,134'), (6,209' - 6,221'), (6,481' - 6,501'), (6,662' - 6,682'), WOB 14K, GPM 500, Motor RPM 70																					
	13:00 - 13:30	0.50	DRLPRO	06	A	P		Lubricate rig and top drive																					
	13:30 - 0:00	10.50	DRLPRO	02	D	P		Drill 6,843' - 7,470', WOB 12-16K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 500, RPM 55, Motor RPM 70, SPP On/Off Bottom 1785/2018, Torque On/Off Bottom 9/2, Mud wt 9.5, Viscosity 36, Footage 627, FPH 59.7, Raised mud weight to 9.5 ppg due to sloughing shale SlideParameters: Depths, (6,942' - 6,967'), (7,295' - 7,320'), WOB 27K, GPM 500, Motor RPM 70, SPP On/Off Bottom 1785/1960, Shows: <table border="1"> <thead> <tr> <th>Depth</th> <th>Units</th> <th>Mud Wt</th> </tr> </thead> <tbody> <tr> <td>7,000'-7,011'</td> <td>555</td> <td>8.9/9.0</td> </tr> <tr> <td>7,124'-7,140'</td> <td>694</td> <td>9.3/9.0</td> </tr> </tbody> </table>	Depth	Units	Mud Wt	7,000'-7,011'	555	8.9/9.0	7,124'-7,140'	694	9.3/9.0												
Depth	Units	Mud Wt																											
7,000'-7,011'	555	8.9/9.0																											
7,124'-7,140'	694	9.3/9.0																											
3/19/2009	0:00 - 13:00	13.00	DRLPRO	02	D	P		Drill 7,470 - 8,110', WOB 14-16K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 500, RPM 55, Motor RPM 70, SPP On/Off Bottom 2250/2050, Torque On/Off Bottom 9/2, Mud wt 10.3, Viscosity 40, Footage 640, FPH 49.2, Raised mud weight to 10.3 ppg due to sloughing shale Slide Parameters: Depths, (7,476' - 7,491'), (7,657' - 7,677'), WOB 27K, GPM 500, Motor RPM 70, SPP On/Off Bottom 1785/1960, Shows: <table border="1"> <thead> <tr> <th>Depth</th> <th>Gas</th> <th>Mud Wt In/Out</th> </tr> </thead> <tbody> <tr> <td>7730'-7741'</td> <td>621 U</td> <td>9.6/9.6</td> </tr> <tr> <td>7767'-7790'</td> <td>664 U</td> <td>9.7/9.6</td> </tr> <tr> <td>7940'-7974'</td> <td>1244 U</td> <td>9.8/9.9</td> </tr> <tr> <td>8023'-8043'</td> <td>1184 U</td> <td>9.8/9.9</td> </tr> <tr> <td>8061'-8093'</td> <td>1323 U</td> <td>9.9/9.9</td> </tr> <tr> <td>8105'-8123'</td> <td>1497 U</td> <td>9.9/9.9</td> </tr> </tbody> </table>	Depth	Gas	Mud Wt In/Out	7730'-7741'	621 U	9.6/9.6	7767'-7790'	664 U	9.7/9.6	7940'-7974'	1244 U	9.8/9.9	8023'-8043'	1184 U	9.8/9.9	8061'-8093'	1323 U	9.9/9.9	8105'-8123'	1497 U	9.9/9.9
	Depth	Gas	Mud Wt In/Out																										
7730'-7741'	621 U	9.6/9.6																											
7767'-7790'	664 U	9.7/9.6																											
7940'-7974'	1244 U	9.8/9.9																											
8023'-8043'	1184 U	9.8/9.9																											
8061'-8093'	1323 U	9.9/9.9																											
8105'-8123'	1497 U	9.9/9.9																											
	13:00 - 13:30	0.50	DRLPRO	06	A	P		Rig service and top drive																					

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]		Spud Conductor: 1/8/2009		Spud Date: 1/24/2009	
Project: UTAH		Site: UINTAH		Rig Name No: ENSIGN 139/139, PROPETRO/	
Event: DRILLING		Start Date: 1/24/2009		End Date: 3/25/2009	
Active Datum: RKB @4,966.50ft (above Mean Sea Level)			UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
	13:30 - 0:00	10.50	DRLPRO	02	D	P		Drill 8,110' - 8,654', WOB 12-16K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 485, RPM 55, Motor RPM 70, SPP On/Off Bottom 2477/2234, Torque On/Off Bottom 12/5, Mud wt 10.6, Viscosity 37, Footage 640, FPH 49.2, Raised mud weight to 10.6 ppg due to sloughing shale and gas Slide Parameters: Depths, (7,476' - 7,491'), (7,657' - 7,677'), (8,291' - 8,314'), (8,381' - 8,396'), (8,562' - 8,577'), WOB 27K, GPM 485, Motor RPM 67, SPP On/Off Bottom 2250/2050 Shows: Depth Gas Mud Wt in/Out 8144'-8155' 1407 U 10.1/10.0 8356'-8380' 2431 U 10.3/10.2 Gas Cut 10-15' Flare 8623'-8636 2368 U 10.6/10.6 8679'-8705' 6178 U 10.6/10.5+ Well flowing, SICP 550, SIDPP 0
3/20/2009	0:00 - 1:00	1.00	DRLPRO	02	D	P		Drill 8,654' - 8,721', WOB 15-17K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 485, RPM 55, Motor RPM 65, SPP On/Off Bottom 2339/2189, Torque On/Off Bottom 12/5, Mud wt 10.6, Viscosity 37, Footage 67, FPH 67 Shows: Depth Gas Mud Wt in/Out 8717'-8745' 485 U 11.1/10.7+
	1:00 - 8:30	7.50	DRLPRO	16	D	X		Well flowing, shut well in and build mw to 11.0 ppg. Well was opened and started kill procedure, venting casing while waiting on returns, after pumping 180 bbls and no returns well was shut in. Build volume and mix LCM to 15%, mw at 11.0 ppg
	8:30 - 10:30	2.00	DRLPRO	16	D	X		Open well through choke and circulate out gas, bottoms up gas was cut from 10.6 ppg to 10.4 ppg
	10:30 - 11:00	0.50	DRLPRO	16	D	X		Open BOP's, first pipe rams then annular. Check flow, well dead
	11:00 - 15:00	4.00	DRLPRO	02	D	P		Drill 8,721' - 8,879', WOB 15-17K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 485, RPM 55, Motor RPM 65, SPP On/Off Bottom 2745/2570, Torque On/Off Bottom 9.8/4.9, Mud wt 11, Viscosity 40, Footage 158, FPH 39.5 Shows: Depth Gas Mud Wt in/Out 8860'-8872' 1854 U 11.1/10.9+ Flare 10'-15'
	15:00 - 15:30	0.50	DRLPRO	06	A	P		Rig service
	15:30 - 17:00	1.50	DRLPRO	02	D	P		Drill 8,879' - 8,910', WOB 15-17K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 485, RPM 55, Motor RPM 65, SPP On/Off Bottom 2745/2570, Torque On/Off Bottom 12/5, Mud wt 11.1, Viscosity 40, Footage 31, FPH 20.6
	17:00 - 17:30	0.50	DRLPRO	04	C	S		Circulate and check in with office about pulling bit
	17:30 - 19:30	2.00	DRLPRO					Drill 8,910' - 8,970', WOB 15-17K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 485, RPM 55, Motor RPM 65, SPP On/Off Bottom 2745/2570, Torque On/Off Bottom 12/5, Mud wt 11.1, Viscosity 40, Footage 60, FPH 30
	19:30 - 20:00	0.50	DRLPRO	16	D	P		BOP Drill - Pickup check flow, shut in well w/ annular, casing pressure 0, open annular

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]		Spud Conductor: 1/8/2009		Spud Date: 1/24/2009	
Project: UTAH		Site: UINTAH		Rig Name No: ENSIGN 139/139, PROPETRO/	
Event: DRILLING		Start Date: 1/24/2009		End Date: 3/25/2009	
Active Datum: RKB @4,966.50ft (above Mean Sea Level)			UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
	20:00 - 0:00	4.00	DRLPRO	02	D	P		Drill 8,970' - 9105', WOB 15-17K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 477, RPM 55, Motor RPM 65, SPP On/Off Bottom 2339/2189, Torque On/Off Bottom 9.8/4.9, Mud wt 11.3, Viscosity 40, Footage 135, FPH 33.75 Slide Parameters: Depths, (9015'-9040'), (9196'9216'), WOB 25-27K, GPM 485, Motor RPM 67, SPP On/Off Bottom 2745/2570 Shows: Depth Gas Mud Wt in/Out 8956'-8965' 1198 U 11.2/11.0 8987'-9005' 2063 U 11.3/11.2+ Flare 5' 9084'-9096' 2170 U 11.4/11.1 Bring up mud weight
3/21/2009	0:00 - 7:00	7.00	DRLPRO	02	D	P		Drill 9,105' - 9,319', WOB 15-17K, Pump #1 58 SPM, Pump #2 58 SPM, GPM 477, RPM 55, Motor RPM 65, SPP On/Off Bottom 2339/2189, Torque On/Off Bottom 9.8/4.9, Mud wt 11.5, Viscosity 40, Footage 214, FPH 30.57 Slide Parameters: Depths, (9015'-9040'), (9196'9216'), WOB 25-27K, GPM 485, Motor RPM 67, SPP On/Off Bottom 2745/2570 Shows: Depth Gas Mud Wt in/Out Circulate prior to trip, check SPR and build pill
	7:00 - 8:30	1.50	DRLPRO	04	C	P		Pump pill and TOOH w/ bit #1
	8:30 - 16:00	7.50	DRLPRO	05	A	P		BOP Drill while tripping
	16:00 - 16:30	0.50	DRLPRO	05	L	P		Rig repair - Iron derrickman
	16:30 - 19:00	2.50	DRLPRO	07	A	S		TOOH w/ bit #1
	19:00 - 21:00	2.00	DRLPRO	05	A	P		Lay down directional tools, stabilizer and motor
	21:00 - 22:30	1.50	DRLPRO	05	A	P		Wear bushing pulled up with BHA, install wear bushing
	22:30 - 23:00	0.50	DRLPRO	05	A	S		Pickup directional tools and scribe
	23:00 - 23:30	0.50	DRLPRO	05	A	P		TIH w/ bit #2
3/22/2009	23:30 - 0:00	0.50	DRLPRO	05	A	P		TIH w/ bit #2
	0:00 - 3:30	3.50	DRLPRO	05	A	P		Rig Repair - Hydraulic line on iron derrick man
	3:30 - 4:00	0.50	DRLPRO	07	A	S		TIH w/ bit #2
	4:00 - 10:30	6.50	DRLPRO	05	A	P		Rig repair - Work on top drive, not operating
	10:30 - 11:00	0.50	DRLPRO	07	B	S		Wash and ream 9180' - 9319', No fill - Lost 70 bbls mud on trip. Trip gas 2150 Units
	11:00 - 12:00	1.00	DRLPRO	03	D	S		Drill 9,319' - 9,766', WOB 14K, Pump #1 105 SPM, Pump #2 0 SPM, GPM 441, RPM 55, Motor RPM 62, SPP On/Off Bottom 2340/2127, Torque On/Off Bottom 10/4, Mud wt 11.6, Viscosity 40, Footage 447, FPH 37.25, BG 150/750 Units, Connection 381/1193 Units, Flares 10-15' on connections Shows: Depth Gas Mud Wt in/Out
	12:00 - 12:00	0.00	DRLPRO					Drill 9,766' - 10,165', WOB 17K, Pump #1 105 SPM, Pump #2 0 SPM, GPM 441, RPM 55, Motor RPM 62, SPP On/Off Bottom 2269/2062, Torque On/Off Bottom 10/4, Mud wt 11.7, Viscosity 40, Footage 309, FPH 30.9, BG 250/350 Units, Connection 450/4990 Units, Flares 5-10' on Connection, 15' on wiper trip NOTE: WHEN OUT OF HOLE, IT WAS DISCOVERED THAT WE HAD ONE EXTRA STAND DRILL PIPE IN HOLE. NEW TD IS 10,165'
3/23/2009	0:00 - 10:00	10.00	DRLPRO	02	D	P		Rig repair, adjust torque on top drive with Tesco rep
	10:00 - 14:00	4.00	DRLPRO	07	B	S		

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]

Spud Conductor: 1/8/2009

Spud Date: 1/24/2009

Project: UTAH

Site: UINTAH

Rig Name No: ENSIGN 139/139, PROPETRO/

Event: DRILLING

Start Date: 1/24/2009

End Date: 3/25/2009

Active Datum: RKB @4,966.50ft (above Mean Sea Level)

UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
	14:00 - 16:00	2.00	DRLPRO	05	E	P		Wiper trip 10 stands - 4985 units trip gas as soon as pump was turned on
	16:00 - 20:30	4.50	DRLPRO	04	B	S		Circulate and condition hole while raising mud weight to 11.8
	20:30 - 23:00	2.50	DRLPRO	05	B	P		TOOH for logs
	23:00 - 0:00	1.00	DRLPRO	07	A	S		Rig repair - iron derrick man hydraulic leaks
3/24/2009	0:00 - 0:30	0.50	DRLPRO	07	A	S		Rig repair, hydraulic leaks on iron derrickman
	0:30 - 7:00	6.50	DRLPRO	05	B	P		TOOH to log
	7:00 - 7:30	0.50	DRLPRO	07	A	S		Rig repair - hydraulics to Scorpion unit
	7:30 - 8:30	1.00	DRLPRO	05	B	P		HSM, break and lay down directional tools
	8:30 - 15:00	6.50	DRLPRO	08	F	P		HSM and rig up Halliburton logging and run Triple Combo. Loggers TD 10173' NOTE; Drillers depth was 10075' but when out of hole discovered that they had 1 extra stand, changed TD to 10165'
	15:00 - 0:00	9.00	DRLPRO	11	A	P		HSM and rig up Kimzey Casing. HSM and run in hole 11 jts 4 1/2" 11.6 #/ft HCP-P110 (465.49'), 229 jts 4 1/2" 11.6 #/ft I-80 (9640.69'), 1 4 1/2" I-80 Marker joint (13.64'), DTO casing landing mandrel (5.70'), 4 1/2" Landing joint (22.00') production casing. Total length 10,149.07'. Landed at 10,143'
3/25/2009	0:00 - 3:30	3.50	DRLPRO	11	B	P		Finish running in hole 11 jts 4 1/2" 11.6 #/ft HCP-P110 (465.49'), 229 jts 4 1/2" 11.6 #/ft I-80 (9640.69'), 1 4 1/2" I-80 Marker joint (13.64'), DTO casing landing mandrel (5.70'), 4 1/2" Landing joint (22.00') production casing. Total length 10,149.07'. Landed at 10,143'
	3:30 - 6:30	3.00	DRLPRO	04	E	P		Circulate down casing and circulate out gas
	6:30 - 11:30	5.00	DRLPRO	15	A	P		HSM w/ Halliburton. Rig up Halliburton, pumped 2 bbls water, pressure tested lines to 4437 psi, pump 10 bbls water, pumped 20 bbls mud flush III, pumped 20 bbls water, cement casing in place with 510 sks Econocem at 11.6 ppg, yield 2.61, water ratio 15.27 gallon per sk, Tailed in with 1630 sks 50/50 Poz Premium at 14.3 ppg, yield 1.25, water ration 5.41 gallons per sk, dropped plug and went to displace, Halliburton could not bring on water to tanks. Hook up lines to rig system and displaced with 157 bbls dirty water. Did not bump plug. Held pressure for 5 minutes and bleed back, floats held, stopped pumping at 10:08. Lift pressure 2200 psi at 1 bpm. Full returns through out job and circulated 45 bbls cement to surface
	11:30 - 13:30	2.00	DRLPRO			P		Pull landing joint, set pack off and pressure test to 5000 psi for 15 minutes
	13:30 - 15:30	2.00	DRLPRO	13	A	P		Nipple down BOPE and flow lines
	15:30 - 17:00	1.50	DRLPRO	01	E	P		Rig down, move catwalk and clean mud tanks. RIG RELEASED AT 1700 HOURS ON 3/25/09

ROCKIES
Operation Summary Report

Well: NBU 921-27C2D [YELLOW] Spud Conductor: 1/8/2009 Spud Date: 1/24/2009
 Project: UTAH Site: UINTAH Rig Name No: MILES-GRAY 1/1, SWABBSCO 1/1
 Event: COMPLETION Start Date: 5/13/2009 End Date: 6/6/2009
 Active Datum: RKB @4,966.50ft (above Mean Sea Level) UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
5/13/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- RDSU.
	7:30 - 18:00	10.50	COMP	30		P		MOVE AND SPOT EQUIP. WAIT UNTIL WIND DIED DOWN. RDSU. ROAD RIG FROM NBU 921-27OT TO LOC. RUSU. TBG AOL AT 15:00. MU 3-7/8" BIT, BIT SUB AND RIH ON 109 JTS 2-3/8" L-80 TBG AS MEAS AND PU. EOT 3451'. SDFN
5/14/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- PU TBG. TRIP HAZZARDS.
	7:30 - 17:30	10.00	COMP	31		P		CONT MEAS AND PU TBG AS RIH W/ 3-7/8" BIT. TAG LIGHT AT 9568', CIRC OUT DRLG MUD AS CONT RIH. TAG FIRM AT 9937'. D/O CMT TO 10,095' (FLOAT COLLAR). D/O FLOAT COLLAR AND 10' CMT TO 10,105' (TBG SLM). CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 10-JTS 2-3/8" L-80 TBG. P-TEST CSG TO 2500 PSI. GOOD. CONT POOH AS LD 90 JTS 2-3/8" L-80 TBG. 220-JTS IN, EOT AT 6956'.
5/15/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- LD TBG.
	7:30 - 11:00	3.50	COMP	31		P		CONT POOH AS LD 217-JTS 2-3/8" L-80 TBG AND BIT. RD FLOOR. ND BOP. NU FRAC VALVES. FILL HOLE W/ 2% TMAC FLUID. RDSU AND MO. 5/20/2009- P-TEST WELLBORE TO 7500 PSI. GOOD.
5/21/2009	7:00 - 7:15	0.25	COMP	48		P		HSM, WORKING W/ CRANES
	7:15 - 10:30	3.25	COMP	37	B	P		MIRU CUTTERS WIRE LINE, P/U RIH W/ 3-1/8 EXPEND, 23 GRM, 0.36" HOLE, 4 SPF, 90* PH, 10048'-10050' 8 HOLES 10030'-10032' 8 HOLES 9966'-9972' 24 HOLES [40 HOLES]
5/26/2009	7:00 - 7:15	0.25	COMP	48		P		HSM. W/ FRAC CREW & CUTTERS.
	7:15 - 17:00	9.75	COMP	36		P		MIRU SCHLUMBERGER & CUTTERS WIRE LINE. FRAC STG #1 IN MESA VERDE 9966'-10050' [40 HOLES] STG #1] WHP=1871#, BRK DN PERFS @ 3970#, INJ PSI=6676#, INJ RT=50.1, ISIP=2950#, FG=.72, PUMP'D 1411 BBLs SLK WTR W/ 49759# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=3365#, FG=.77, AR=38.8, AP=5206#, MR=52.2, MP=7059#, NPI=415#, 32/40 CALC PERFS OPEN. STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 9790', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 9756'-9760' 4 SPF, 90* PH, 16 HOLES. 9692'-9696' 3 SPF, 120* PH, 12 HOLES. 9640'-9644' 3 SPF, 120* PH, 12 HOLES [40 HOLES] STG #2] WHP=1649#, BRK DN PERFS @ 3175#, INJ PSI=5394#, INJ RT=51.2, ISIP=2550#, FG=.69, PUMP'D 405 BBLs SLK WTR W/ 11463# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2940#, FG=.74, AR=41.4, AP=4740#, MR=51.1, MP=5630#, NPI=390#, 33/40 CALC PERFS OPEN. SWIFN.

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]		Spud Conductor: 1/8/2009		Spud Date: 1/24/2009	
Project: UTAH		Site: UINTAH		Rig Name No: MILES-GRAY 1/1, SWABBCO 1/1	
Event: COMPLETION		Start Date: 5/13/2009		End Date: 6/6/2009	
Active Datum: RKB @4,966.50ft (above Mean Sea Level)		UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
5/27/2009	7:00 - 18:00	11.00	COMP	36	E	P		<p>STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 9560', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 9528'-9530' 4 SPF, 90* PH, 8 HOLES. 9510'-9512' 4 SPF, 90* PH, 8 HOLES. 9440'-9442' 3 SPF, 120* PH, 6 HOLES. 9392'-9294' 3 SPF, 120* PH, 6 HOLES. 9318'-9322' 3 SPF, 120* PH, 12 HOLES. [40 HOLES]</p> <p>STG #3] WHP=0##, BRK DN PERFS @ 3823#, INJ PSI=5670#, INJ RT=51.6, ISIP=2970#, FG=.75, PUMP'D 917 BBLS SLK WTR W/ 34741# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=3200#, FG=.77, AR=46.3, AP=4557#, MR=56.2, MP=6016#, NPI=230#, 35/40 CALC PERFS OPEN.</p> <p>STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 9264', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 9232'-9234' 3 SPF, 120* PH, 6 HOLES. 9214'-9218' 4 SPF, 90* PH, 16 HOLES. 9150'-9154' 3 SPF, 120* PH, 12 HOLES. 9082'- 9084' 3 SPF, 120* PH, 6 HOLES [40 HOLES]</p> <p>STG #4] WHP=1880#, BRK DN PERFS @ 3670#, INJ PSI=5600#, INJ RT=52.4, ISIP=2370#, FG=.69, PUMP'D 1310 BBLS SLK WTR W/ 52866# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2940#, FG=.75, AR=44.4, AP=4607#, MR=56.2, MP=6016#, NPI=570#, 33/40 CALC PERFS OPEN.</p> <p>STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8986', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8952'-8956' 3 SPF, 120* PH, 12 HOLES, 8882'-8884' 3 SPF, 120* PH, 6 HOLES, 8820'-8824' 3 SPF, 120* PH, 12 HOLES, 8804'-8806' 4 SPF 90* PH, 8 HOLES [38 HOLES]</p> <p>STG #5] WHP=1897#, BRK DN PERFS @ 3533#, INJ PSI=5150#, INJ RT=49.9, ISIP=2150#, FG=.67, PUMP'D 796 BBLS SLK WTR W/ 29078# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2900#, FG=.76, AR=44.9, AP=4678#, MR=50.4, MP=5522#, NPI=750#, 35/40 CALC PERFS OPEN. SWIFN. HSM, WIRE LINE</p>
5/28/2009	7:00 - 7:15	0.25	COMP	48		P		

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]		Spud Conductor: 1/8/2009		Spud Date: 1/24/2009	
Project: UTAH		Site: UINTAH		Rig Name No: MILES-GRAY 1/1, SWABBCO 1/1	
Event: COMPLETION		Start Date: 5/13/2009		End Date: 6/6/2009	
Active Datum: RKB @4,966.50ft (above Mean Sea Level)			UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
	7:15 - 7:15	0.00	COMP					<p>STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN. SET CBP @ 8880', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 7818'-8720' 3 SPF, 120* PH, 6 HOLES. 8680'-8682' 3 SPF, 120* PH, 6 HOLES. 8524'-8528' 4 SPF, 90* PH, 16 HOLES. 8472'-8476' 3 SPF, 120* PH, 12 HOLES. [40 HOLES]</p> <p>STG #6]WHP=1204#, BRK DN PERFS @ 3123#, INJ PSI=5900#, INJ RT=55.1, ISIP=2170#, FG=68, PUMP'D 2371 BBLS SLK WTR W/ 87992# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2950#, FG=77, AR=51.7, AP=4867#, MR=56, MP=5975#, NPI=780#, 31/40 CALC PERFS OPEN.</p> <p>STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN. SET CBP @ 8880', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 8216'-8220' 4 SPF, 90* PH, 16 HOLES. 8170'-8176' 2 SPF, 180* PH, 12 HOLES. 8060'-8064' 3 SPF, 120* PH, 12 HOLES. [40 HOLES]</p> <p>STG #7]WHP=1307#, BRK DN PERFS @ 2642#, INJ PSI=4501#, INJ RT=50.1, ISIP=2225#, FG=69, PUMP'D 1609 BBLS SLK WTR W/ 67391# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2225#, FG=72, AR=46.3, AP=3983#, MR=50.9, MP=5111#, NPI=0#, 40/40 CALC PERFS OPEN.</p> <p>STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN. SET CBP @ 8880', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 7864'-7870' 3 SPF, 120* PH, 18 HOLES. 7828'-7832' 3 SPF, 120* PH, 12 HOLES. 7754'-7758' 3 SPF, 120* PH, 12 HOLES. [42 HOLES]</p> <p>STG #8]WHP=843#, BRK DN PERFS @ 2566#, INJ PSI=4932#, INJ RT=49.4, ISIP=1840#, FG=67, PUMP'D 1646 BBLS SLK WTR W/ 78651# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2880#, FG=80, AR=46.7, AP=4413#, MR=50.4, MP=6762#, NPI=1040#, 38/40 CALC PERFS OPEN. SWI.</p>
6/4/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2400#, TP 2150#, 20/64" CK, 45 BWPH, MEDIUM SAND,- GAS TTL BBLS RECOVERED: 2340 BBLS LEFT TO RECOVER: 9358</p>
	16:00 - 20:00	4.00	COMP	30		P		<p>HSM MIRU NDFV NUBOP TEST BOP = GOOD TEST TIH 3 7/8 BIT POBS XN NIPPLE & 150 JNTS SWI SDFN</p>

ROCKIES

Operation Summary Report

Well: NBU 921-27C2D [YELLOW]		Spud Conductor: 1/8/2009		Spud Date: 1/24/2009	
Project: UTAH		Site: UINTAH		Rig Name No: MILES-GRAY 1/1, SWABBCO 1/1	
Event: COMPLETION		Start Date: 5/13/2009		End Date: 6/6/2009	
Active Datum: RKB @4,966.50ft (above Mean Sea Level)			UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/O/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Subcode2	P/U	MD From (ft)	Operation
6/5/2009	7:00 - 18:30	11.50	COMP	30		P		HSM TIH TAG 1ST PLUG WITH JNT 244 @ 7710' P/U SWIVEL WITH JNT 244 DRILL PLUGS AS FOLLOWS: #1 @ 7710' JNT 244 15 MIN 650# KICK CSG @ 300# #2 @ 7902' JNT 250 15 MIN 900# KICK CSG @ 350# #3 @ 8252' JNT 261 15 MIN 1000# KICK CSG @ 350# #4 @ 8746' JNT 277 15 MIN 1000# KICK CSG @ 450# #5 @ 8994' JNT 285 10 MIN 1200# KICK CSG @ 450# #6 @ 9298' JNT 294 15 MIN 800# KICK CSG @ 500# #7 @ 9568' JNT 303 20 MIN 800# KICK CSG @ 550# #8 @ 9803' JNT 310 15 MIN 1300# KICK CSG @ 600# CLEAN OUT TO PBSD @ 10,105' WITH JNT 319 + 10' SUB CIRC HOLE CLEAN HUNG SWIVEL LD 15 JNTS LTBG @ 9622' WITH 304 JNTS DROP BALL NDBOP NUWH PUMP OFF BIT @ 3700# HOOK UP FLOW BACK LINE TURN WELL OVER TO FLOWBACK CREW @
	7:00 -			33	A			7 AM FLBK REPORT: CP 2900#, TP 2000#, 20/64" CK, 50 BWPH, MEDIUM SAND, - GAS TTL BBLs RECOVERED: 2243 BBLs LEFT TO RECOVER: 7497
6/6/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3150#, TP 2025#, 20/64" CK, 35 BWPH, MEDIUM SAND, - GAS TTL BBLs RECOVERED: 3223 BBLs LEFT TO RECOVER: 6517
	7:00 - 8:00	1.00	COMP	30		P		HSM RDMO
	12:30 -		COMP	50				WELL TURNED TO SALES @ 1230 HR ON 6/6/2009 - FTP 2050#, CP 3350#, 1597 MCFD, 40 BWPH, 20/64" CK
6/7/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2950#, TP 1950#, 20/64" CK, 30 BWPH, MEDIUM SAND, - GAS TTL BBLs RECOVERED: 3968 BBLs LEFT TO RECOVER: 5772
6/8/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2800#, TP 1900#, 20/64" CK, 30 BWPH, MEDIUM SAND, - GAS TTL BBLs RECOVERED: 4663 BBLs LEFT TO RECOVER: 5077
6/9/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1800#, 20/64" CK, 25 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5263 BBLs LEFT TO RECOVER: 4477

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME UNIT #891008900A	
d. TYPE OF WORK: NEW WELL <input type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: NBU 921-27C2D	
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP		9. API NUMBER: 4304740227	
3. ADDRESS OF OPERATOR: 1368 S 1200 E CITY VERNAL STATE UT ZIP 84078		PHONE NUMBER: (435) 781-7024	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 650'FNL, 1730'FWL AT TOP PRODUCING INTERVAL REPORTED BELOW: AT TOTAL DEPTH: 641 FNL 1715 FWL NENW 5-29 T09S R21E		10 FIELD AND POOL, OR WILDCAT NATURAL BUTTES	
14. DATE SPUNDED: 1/8/2009		15. DATE T.D. REACHED: 3/24/2009	
16. DATE COMPLETED: 6/6/2009		ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	
17. ELEVATIONS (DF, RKB, RT, GL): 4953'GL		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 27 9S 21E	
18. TOTAL DEPTH: MD 10,165 TVD 10164		19. PLUG BACK T.D.: MD 10,105 TVD 10104	
20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE MD PLUG SET: TVD	
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) KBL-CCL-GR, ALTR/SD/DSW		23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
12 1/4"	9 5/8 J-55	36#		2,550		690			
7 7/8"	4 1/2 I-80	11.6#		10,165		2140			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	9.622							

26. PRODUCING INTERVALS <i>WSMUD per Unit PA</i>					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) MESAVERDE	7,754	10,050			7,754 10,050	0.36	320	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7,754'-10,050'	PMP 10,445 BBLs SLICK H2O & 411,931# 30/50 OTTOWA SD

29. ENCLOSED ATTACHMENTS:		30. WELL STATUS:
<input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> CORE ANALYSIS <input type="checkbox"/> DST REPORT <input type="checkbox"/> OTHER: _____ <input type="checkbox"/> DIRECTIONAL SURVEY		PROD

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 6/6/2009		TEST DATE: 6/11/2009		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 2,406	WATER - BBL: 240	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,760	CSG. PRESS. 2,650	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 2,406	WATER - BBL: 240	INTERVAL STATUS: PROD

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,565				
BIRDS NEST	1,880				
MAHOGANY	2,392				
WASATCH	4,889	7,743			
MESAVERDE	7,789	10,150			

34. FORMATION (Log) MARKERS:

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHEILA WOPSOCK

TITLE REGULATORY ANALYST

SIGNATURE 

DATE 7/31/2009

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
Fax: 801-359-3940



Scientific Drilling
Rocky Mountain Operations

END OF WELL REPORT

Prepared For:

Kerr McGee Oil & Gas Onshore LP
NBU 921-27C2D
Ensign 139
Uintah County, UT

Prepared By:

Julie Cruse, Rockies Region Engineer
Scientific Drilling
Rocky Mountain Region

Scientific Drilling International
7237 W. Barton Rd., Casper, WY 82604
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(307) 472-6621
julie.cruse@scientificdrilling.com



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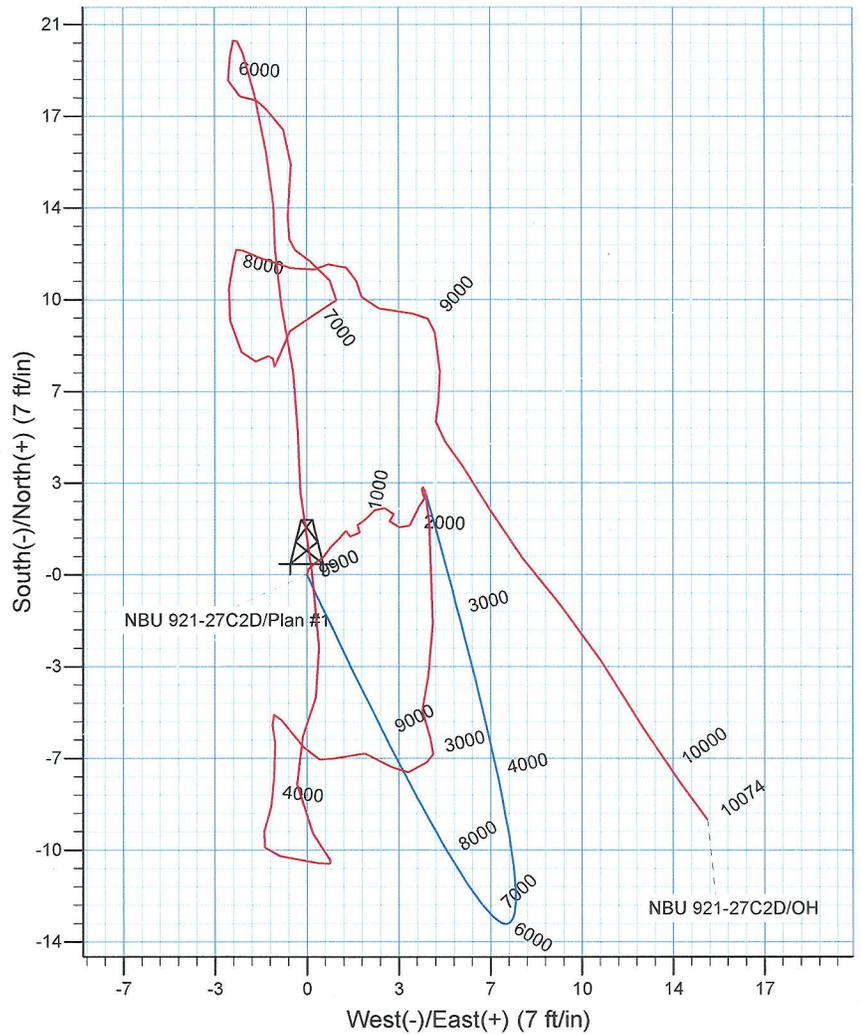
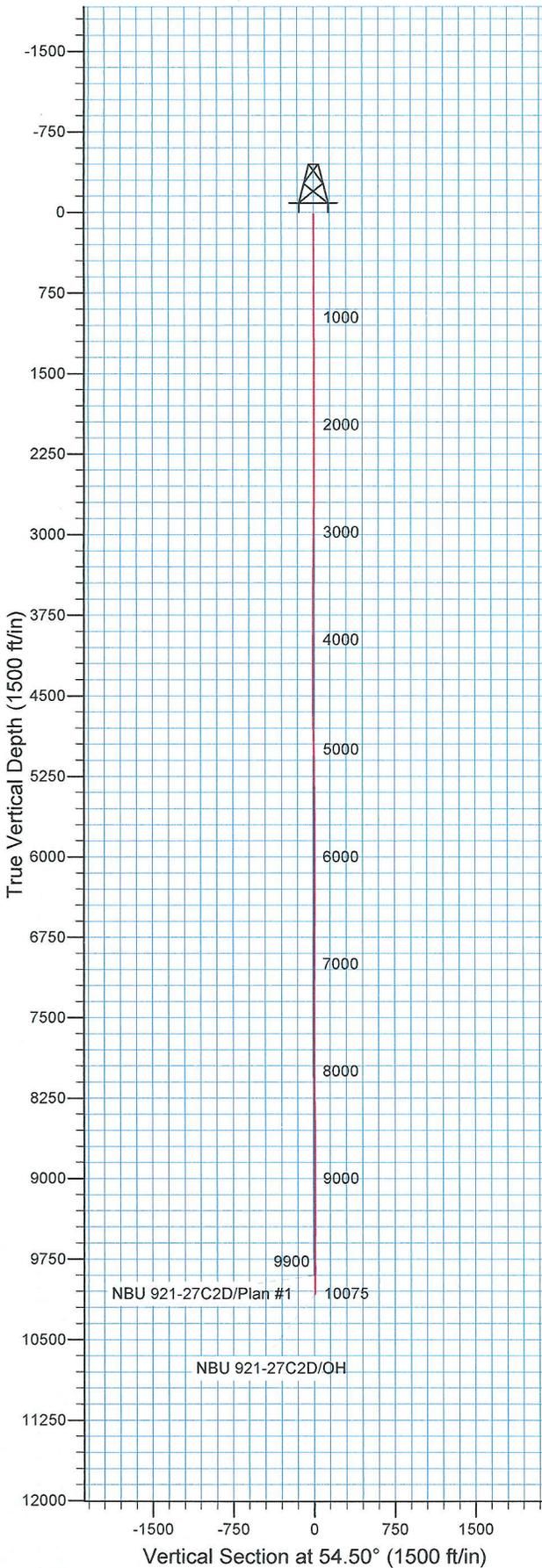
- 1. Directional Plot and Surveys**
- 2. Daily Drilling Reports**
- 3. BHA Summary Reports and Slide Sheets**
- 4. Graphical Job History**
- 5. Support Staff**



Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT NAD27
Site: NBU 921-27C Pad
Well: NBU 921-27C2D
Wellbore: OH
Design: OH

Kerr McGee Oil and Gas Onshore LP



WELL DETAILS: NBU 921-27C2D

Ground Level: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
 Northing: 617637.58 Easting: 2548806.11 Latitude: 40° 0' 45.260 N Longitude: 109° 32' 25.740 W

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well NBU 921-27C2D, True North
 Vertical (TVD) Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
 Calculation Method: Minimum Curvature
 Local North: True
 Location: Sec 27 T9S R21E

PROJECT DETAILS: Uintah County, UT NAD27

Design: OH (NBU 921-27C2D/OH)

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: Utah Central 4302

Created By: Julie Cruse Date: 2009-03-26



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT NAD27
NBU 921-27C Pad
NBU 921-27C2D
OH**

Design: OH

Standard Survey Report

26 March, 2009



Scientific Drilling

Survey Report

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT NAD27
Site: NBU 921-27C Pad
Well: NBU 921-27C2D
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-27C2D
TVD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
MD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User Db

Project	Uintah County, UT NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site	NBU 921-27C Pad, Sec 27 T9S R21E				
Site Position:		Northing:	617,657.58 ft	Latitude:	40° 0' 45.450 N
From:	Lat/Long	Easting:	2,548,839.91 ft	Longitude:	109° 32' 25.300 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	1.26 °

Well	NBU 921-27C2D, 650' FNL 1730' FWL					
Well Position	+N/-S	0.00 ft	Northing:	617,637.58 ft	Latitude:	40° 0' 45.260 N
	+E/-W	0.00 ft	Easting:	2,548,806.11 ft	Longitude:	109° 32' 25.740 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,951.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	2009-03-06	11.37	65.94	52,583

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	54.50	

Survey Program	Date	2009-03-26			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
113.00	2,438.00	Survey #1 (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
2,530.00	10,075.00	Survey #2 (OH)	MWD	MWD - Standard	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13.00	0.00	0.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	0.25	15.63	113.00	0.21	0.06	0.17	0.25	0.25	0.00
213.00	0.25	82.38	213.00	0.45	0.33	0.53	0.28	0.00	66.75
313.00	0.25	26.14	313.00	0.67	0.65	0.92	0.24	0.00	-56.24
413.00	0.25	43.89	413.00	1.03	0.89	1.32	0.08	0.00	17.75
513.00	0.25	47.65	513.00	1.33	1.21	1.75	0.02	0.00	3.76
613.00	0.25	29.40	613.00	1.67	1.47	2.17	0.08	0.00	-18.25
713.00	0.25	200.16	712.99	1.65	1.51	2.19	0.50	0.00	170.76
813.00	0.25	88.91	812.99	1.45	1.65	2.19	0.41	0.00	-111.25
913.00	0.25	44.67	912.99	1.61	2.02	2.58	0.19	0.00	-44.24
1,013.00	0.25	274.42	1,012.99	1.78	1.96	2.63	0.45	0.00	-130.25
1,113.00	0.25	64.18	1,112.99	1.90	1.94	2.66	0.48	0.00	149.76



Scientific Drilling

Survey Report

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT NAD27
Site: NBU 921-27C Pad
Well: NBU 921-27C2D
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-27C2D
TVD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
MD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
1,213.00	0.25	41.93	1,212.99	2.15	2.28	3.10	0.10	0.00	-22.25	
1,313.00	0.25	47.69	1,312.99	2.46	2.58	3.53	0.03	0.00	5.76	
1,413.00	0.25	106.22	1,412.99	2.55	2.96	3.89	0.24	0.00	58.53	
1,513.00	0.25	139.98	1,512.99	2.32	3.31	4.04	0.15	0.00	33.76	
1,613.00	0.25	274.73	1,612.99	2.17	3.23	3.89	0.46	0.00	134.75	
1,713.00	0.25	135.49	1,712.99	2.03	3.16	3.76	0.47	0.00	-139.24	
1,813.00	0.25	104.24	1,812.99	1.82	3.53	3.93	0.13	0.00	-31.25	
1,913.00	0.25	57.00	1,912.99	1.89	3.92	4.29	0.20	0.00	-47.24	
2,013.00	0.25	355.75	2,012.99	2.23	4.09	4.62	0.25	0.00	-61.25	
2,113.00	0.25	55.51	2,112.99	2.57	4.25	4.95	0.25	0.00	59.76	
2,213.00	0.25	13.26	2,212.98	2.90	4.48	5.34	0.18	0.00	-42.25	
2,313.00	0.25	315.02	2,312.98	3.27	4.38	5.46	0.24	0.00	-58.24	
2,413.00	0.25	112.77	2,412.98	3.34	4.43	5.54	0.49	0.00	157.75	
2,438.00	0.50	164.53	2,437.98	3.21	4.50	5.53	1.59	1.00	207.04	
2,530.00	1.02	176.34	2,529.97	2.01	4.66	4.96	0.59	0.57	12.84	
First SDI Survey										
2,621.00	1.24	179.57	2,620.96	0.22	4.72	3.97	0.25	0.24	3.55	
2,711.00	1.40	176.60	2,710.93	-1.86	4.80	2.83	0.19	0.18	-3.30	
2,802.00	1.15	194.65	2,801.91	-3.85	4.63	1.54	0.52	-0.27	19.84	
2,896.00	0.48	178.90	2,895.90	-5.15	4.40	0.59	0.74	-0.71	-16.76	
2,983.00	1.03	158.56	2,982.89	-6.25	4.69	0.19	0.69	0.63	-23.38	
3,073.00	0.57	250.66	3,072.89	-7.15	4.57	-0.43	1.33	-0.51	102.33	
3,164.00	0.44	228.71	3,163.88	-7.53	3.88	-1.22	0.25	-0.14	-24.12	
3,254.00	0.72	317.42	3,253.88	-7.34	3.23	-1.63	0.93	0.31	98.57	
3,345.00	0.82	279.56	3,344.87	-6.81	2.21	-2.16	0.56	0.11	-41.60	
3,435.00	0.78	240.76	3,434.86	-7.00	1.04	-3.22	0.59	-0.04	-43.11	
3,526.00	1.22	319.30	3,525.85	-6.57	-0.14	-3.93	1.44	0.48	86.31	
3,616.00	0.47	325.90	3,615.84	-5.54	-0.97	-4.01	0.84	-0.83	7.33	
3,707.00	0.17	211.45	3,706.84	-5.35	-1.25	-4.12	0.62	-0.33	-125.77	
3,797.00	0.34	177.01	3,796.84	-5.73	-1.30	-4.39	0.25	0.19	-38.27	
3,888.00	0.55	171.18	3,887.84	-6.43	-1.22	-4.73	0.24	0.23	-6.41	
3,978.00	1.11	185.91	3,977.83	-7.72	-1.25	-5.50	0.66	0.62	16.37	
4,069.00	0.29	186.32	4,068.82	-8.83	-1.36	-6.23	0.90	-0.90	0.45	
4,159.00	0.99	198.47	4,158.81	-9.79	-1.63	-7.02	0.79	0.78	13.50	
4,250.00	1.08	103.01	4,249.81	-10.73	-1.05	-7.08	1.68	0.10	-104.90	
4,340.00	0.85	97.14	4,339.79	-11.00	0.44	-6.03	0.28	-0.26	-6.52	
4,431.00	0.41	312.01	4,430.79	-10.87	0.87	-5.60	1.33	-0.48	-159.48	
4,521.00	1.14	332.62	4,520.78	-9.86	0.22	-5.55	0.86	0.81	22.90	
4,612.00	1.34	350.44	4,611.76	-8.01	-0.37	-4.95	0.47	0.22	19.58	
4,702.00	1.13	26.10	4,701.74	-6.17	-0.16	-3.71	0.87	-0.23	39.62	
4,793.00	0.90	8.63	4,792.73	-4.66	0.34	-2.43	0.42	-0.25	-19.20	
4,883.00	1.52	0.64	4,882.71	-2.77	0.46	-1.23	0.71	0.69	-8.88	
4,973.00	2.14	350.40	4,972.66	0.08	0.20	0.21	0.78	0.69	-11.38	
5,064.00	1.78	353.79	5,063.61	3.16	-0.24	1.64	0.42	-0.40	3.73	
5,154.00	1.08	3.23	5,153.58	5.40	-0.34	2.86	0.82	-0.78	10.49	
5,245.00	1.83	351.51	5,244.55	7.69	-0.51	4.05	0.88	0.82	-12.88	
5,335.00	1.48	348.56	5,334.51	10.25	-0.95	5.18	0.40	-0.39	-3.28	
5,426.00	1.27	359.15	5,425.48	12.41	-1.20	6.23	0.36	-0.23	11.64	
5,516.00	0.86	356.05	5,515.47	14.09	-1.26	7.15	0.46	-0.46	-3.44	
5,606.00	1.67	350.09	5,605.45	16.05	-1.53	8.07	0.91	0.90	-6.62	
5,697.00	1.21	346.84	5,696.42	18.29	-1.98	9.01	0.51	-0.51	-3.57	
5,787.00	0.92	341.04	5,786.40	19.90	-2.43	9.58	0.34	-0.32	-6.44	
5,878.00	0.30	209.73	5,877.40	20.39	-2.79	9.57	1.25	-0.68	-144.30	
5,968.00	0.50	181.87	5,967.40	19.79	-2.92	9.12	0.30	0.22	-30.96	



Scientific Drilling

Survey Report

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT NAD27
Site: NBU 921-27C Pad
Well: NBU 921-27C2D
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-27C2D
TVD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
MD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,059.00	0.66	186.74	6,058.39	18.87	-2.99	8.52	0.18	0.18	5.35
6,149.00	0.67	100.19	6,148.39	18.26	-2.54	8.54	1.01	0.01	-96.17
6,240.00	0.17	121.78	6,239.38	18.10	-1.90	8.97	0.57	-0.55	23.73
6,330.00	0.48	136.05	6,329.38	17.76	-1.52	9.07	0.35	0.34	15.86
6,421.00	0.78	143.24	6,420.38	16.99	-0.89	9.14	0.34	0.33	7.90
6,511.00	1.08	185.12	6,510.37	15.65	-0.60	8.60	0.80	0.33	46.53
6,602.00	1.41	181.85	6,601.34	13.68	-0.71	7.37	0.37	0.36	-3.59
6,692.00	0.44	119.34	6,691.33	12.40	-0.44	6.84	1.41	-1.08	-69.46
6,783.00	0.48	133.93	6,782.33	11.97	0.14	7.06	0.14	0.04	16.03
6,873.00	0.84	135.05	6,872.32	11.24	0.87	7.24	0.40	0.40	1.24
6,964.00	0.45	217.15	6,963.32	10.48	1.13	7.01	0.99	-0.43	90.22
7,054.00	0.82	246.82	7,053.31	9.95	0.32	6.04	0.54	0.41	32.97
7,144.00	0.70	222.86	7,143.31	9.29	-0.64	4.87	0.37	-0.13	-26.62
7,235.00	0.71	183.87	7,234.30	8.32	-1.06	3.97	0.52	0.01	-42.85
7,326.00	0.29	324.82	7,325.30	7.94	-1.23	3.61	1.05	-0.46	154.89
7,416.00	0.19	30.81	7,415.30	8.26	-1.28	3.75	0.31	-0.11	73.32
7,506.00	0.31	262.96	7,505.30	8.36	-1.45	3.67	0.50	0.13	-142.06
7,597.00	0.38	235.25	7,596.30	8.15	-1.94	3.16	0.20	0.08	-30.45
7,687.00	0.78	330.77	7,686.29	8.52	-2.49	2.92	1.00	0.44	106.13
7,778.00	0.81	348.78	7,777.28	9.69	-2.91	3.26	0.28	0.03	19.79
7,868.00	0.79	7.23	7,867.27	10.93	-2.96	3.94	0.29	-0.02	20.50
7,959.00	0.47	13.63	7,958.27	11.92	-2.79	4.65	0.36	-0.35	7.03
8,050.00	0.15	5.78	8,049.27	12.40	-2.69	5.01	0.35	-0.35	-8.63
8,140.00	0.34	118.95	8,139.27	12.38	-2.45	5.20	0.47	0.21	125.74
8,231.00	0.63	109.27	8,230.26	12.09	-1.74	5.60	0.33	0.32	-10.64
8,321.00	0.93	107.02	8,320.26	11.71	-0.57	6.33	0.34	0.33	-2.50
8,412.00	0.29	44.29	8,411.25	11.66	0.29	7.01	0.92	-0.70	-68.93
8,502.00	0.47	84.98	8,501.25	11.86	0.82	7.55	0.35	0.20	45.21
8,593.00	0.44	116.41	8,592.25	11.73	1.51	8.04	0.27	-0.03	34.54
8,683.00	0.45	168.90	8,682.24	11.23	1.88	8.06	0.44	0.01	58.32
8,774.00	0.38	155.03	8,773.24	10.61	2.08	7.85	0.13	-0.08	-15.24
8,864.00	0.71	106.51	8,863.24	10.18	2.74	8.14	0.60	0.37	-53.91
8,955.00	0.95	92.84	8,954.23	9.98	4.03	9.08	0.34	0.26	-15.02
9,045.00	0.88	172.20	9,044.22	9.26	4.87	9.34	1.30	-0.08	88.18
9,136.00	1.01	171.94	9,135.21	7.77	5.08	8.65	0.14	0.14	-0.29
9,226.00	0.50	206.20	9,225.20	6.64	5.02	7.94	0.73	-0.57	38.07
9,315.00	0.57	169.98	9,314.20	5.85	4.92	7.41	0.38	0.08	-40.70
9,405.00	0.53	138.49	9,404.19	5.10	5.28	7.26	0.33	-0.04	-34.99
9,496.00	0.92	148.13	9,495.18	4.16	5.94	7.26	0.45	0.43	10.59
9,587.00	1.47	148.47	9,586.16	2.55	6.94	7.13	0.60	0.60	0.37
9,677.00	1.45	143.15	9,676.14	0.65	8.23	7.08	0.15	-0.02	-5.91
9,768.00	1.48	138.62	9,767.11	-1.15	9.69	7.22	0.13	0.03	-4.98
9,858.00	1.92	148.01	9,857.07	-3.30	11.26	7.25	0.58	0.49	10.43
9,949.00	1.89	147.68	9,948.02	-5.86	12.87	7.07	0.04	-0.03	-0.36
10,020.00	1.95	143.99	10,018.98	-7.83	14.21	7.02	0.19	0.08	-5.20
10,075.00	1.95	143.99	10,073.94	-9.34	15.31	7.04	0.00	0.00	0.00

Projection to TD



Scientific Drilling

Survey Report

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT NAD27
Site: NBU 921-27C Pad
Well: NBU 921-27C2D
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-27C2D
TVD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
MD Reference: GL 4951' & RKB 13' @ 4964.00ft (Ensign 139)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User Db

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-27C2D PBHL	0.00	0.00	9,900.00	0.01	0.00	617,637.59	2,548,806.11	40° 0' 45.260 N	109° 32' 25.740 W
- actual wellpath misses target center by 12.84ft at 9900.62ft MD (9899.66 TVD, -4.51 N, 12.01 E) - Circle (radius 25.00)									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,530.00	2,529.97	2.01	4.66	First SDI Survey
10,075.00	10,073.94	-9.34	15.31	Projection to TD

Checked By: _____ Approved By: _____ Date: _____



JOB NO.:	42DEF0903122	Report Time:	2400	1 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT\ RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Sunday, March 15, 2009 at 0000 to Sunday, March 15, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	0.00	Rotary Hours	0.00	WOB	0	Pick UP	0	Slack Off	0	SPM	
End Depth	0.00	Circulating Hours	0.00	RAB	0	SPP	0	FlowRate	0-0		0
Total Drilled:	0.00	Avg. Total ROP:	NA	Mud Data							
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	NA	Type		PV	0	SOLID			0
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	0	GAS	0	YP	0	BHT°	0
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	0	SAND	0	PH	0	Flow T°	0
Below Rotary Hrs.	0.00	Percent Slide:	NA	Chlorides	0	WL	0			Oil %	0

PERSONNEL				cASING			BHA				
Lead Directional :	Bob Brewer			Size	Lb/ft	Set Depth	N/A				
Second Directional :	Brandon Burkett			9 5/8	36	2534					
MWD Operator1	Adam Merha			Signature:							
MWD Operator2	Tad Heil										
Directional Company:	Scientific Drilling International										
Geologist:											
Company Man:	Kent Moore			Incl. In:	0	Azm. In:	0	Incl. Out:	0.86	Azm. Out:	356.05

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Mar-09	00:00	24:00	24.00	0	0	Standby	Rig skid, prep directional tools



JOB NO.:	42DEF0903122	Report Time:	2400	2 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECTIRANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Monday, March 16, 2009 at 0000 to Monday, March 16, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	2359.00	Rotary Hours	9.92	WOB	12	Pick UP	100	Slack Off	95	SPM	
End Depth	3495.00	Circulating Hours	0.00	RAB	97	SPP	1355	FlowRate	0 - 462	110	
Total Drilled:	1124.00	Avg. Total ROP:	98.45	Mud Data							
Total Rotary Drilled:	1048.00	Avg. Rotary ROP:	105.68	Type		PV	0	SOLID	0		
Total Drilled Sliding:	76.00	Avg. Slide ROP:	50.67	Weight	0	GAS	0	YP	0	BHT°	0
Slide Hours:	1.50	Percent Rotary:	93.24	Viscosity	0	SAND	0	PH	0	Flow T°	0
Below Rotary Hrs.	21.50	Percent Slide:	6.76	Chlorides	0	WL	0			Oil %	0

PERSONNEL				cASING			BHA
Lead Directional :	Bob Brewer			Size	Lb/ft	Set Depth	BHA # 1: Baker Hughes Q506 w/6x11s , SDI 3.3stg. MOTOR 1.25, Stabilizer 7 5/8 3-blades, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,
Second Directional :	Brandon Burkett			9 5/8	36	2534	
MWD Operator1	Adam Merha			Signature:			
MWD Operator2	Tad Heil						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Kent Moore						
Incl. In:	0	Azm. In:	0	Incl. Out:	0.78	Azm. Out:	240.76

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
16-Mar-09	00:00	02:30	2.50	0	0	Test BOPS	Test BOPS
16-Mar-09	02:30	04:45	2.25	0	0	Change BHA	Pickup Tools
16-Mar-09	04:45	08:30	3.75	0	2359	TIH	TIH
16-Mar-09	08:30	10:00	1.50	2359	2359	Other	Level rig, install rot head
16-Mar-09	10:00	12:15	2.25	2359	2564	Drilling Cement	Drill cmt & equipment
16-Mar-09	12:15	12:30	0.25	2564	2564	Survey & Conn.	Survey & Conn.
16-Mar-09	12:30	14:10	1.67	2564	2790	Drilling	Rotate
16-Mar-09	14:10	14:30	0.33	2790	2805	Sliding	Sliding
16-Mar-09	14:30	15:00	0.50	2805	2862	Drilling	Drilling - (WOB:8;GPM :440;RPM:45)
16-Mar-09	15:00	15:15	0.25	2862	2862	Survey & Conn.	Survey & Conn.
16-Mar-09	15:15	15:50	0.58	2862	2862	Drilling	Drilling-(WOB:12,GPM:440,RPM:45)
16-Mar-09	15:50	16:10	0.33	2874	2890	Sliding	Sliding - (WOB:8;GPM :440;TFO:0)
16-Mar-09	16:10	16:40	0.50	2890	2956	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	16:40	17:05	0.42	2956	2956	Rig Service-Inhole	Rig Service-conn/surv
16-Mar-09	17:05	17:55	0.83	2956	3043	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	17:55	18:00	0.08	3043	3043	Survey & Conn.	Survey & Conn.
16-Mar-09	18:00	18:30	0.50	3043	3068	Sliding	Sliding - (WOB:8;GPM :440;TFO:330;DIFF PRESS 135)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
16-Mar-09	18:30	19:10	0.67	3068	3133	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	19:10	19:20	0.17	3133	3133	Survey & Conn.	Survey & Conn.
16-Mar-09	19:20	20:10	0.83	3133	3224	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	20:10	21:05	0.92	3224	3224	Rig repair	Rig repair
16-Mar-09	21:05	21:10	0.08	3224	3224	Survey & Conn.	Survey & Conn.
16-Mar-09	21:10	21:30	0.33	3224	3244	Sliding	Sliding - (WOB:8;GPM :440;TFO:0; DIFF PRESS 125)
16-Mar-09	21:30	22:15	0.75	3244	3314	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	22:15	22:20	0.08	3314	3314	Survey & Conn.	Survey & Conn.
16-Mar-09	22:20	23:05	0.75	3314	3405	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	23:05	23:15	0.17	3405	3405	Survey & Conn.	Survey & Conn.
16-Mar-09	23:15	23:50	0.58	3405	3495	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
16-Mar-09	23:50	24:00	0.17	3495	3495	Survey & Conn.	Survey & Conn.



JOB NO.:	42DEF0903122	Report Time:	2400	3 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT/RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Tuesday, March 17, 2009 at 0000 to Tuesday, March 17, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	3495.00	Rotary Hours	13.83	WOB	12	Pick UP	135	Slack Off	125	SPM	
End Depth	5625.00	Circulating Hours	0.00	RAB	130	SPP	1450	FlowRate	440 - 504	120	
Total Drilled:	2130.00	Avg. Total ROP:	113.10	Mud Data							
Total Rotary Drilled:	1836.00	Avg. Rotary ROP:	132.72	Type		PV	0	SOLID	0		
Total Drilled Sliding:	294.00	Avg. Slide ROP:	58.80	Weight	8.4	GAS	0	YP	0	BHT°	0
Slide Hours:	5.00	Percent Rotary:	86.20	Viscosity	26	SAND	0	PH	7.5	Flow T°	0
Below Rotary Hrs.	24.00	Percent Slide:	13.80	Chlorides	0	WL	0			Oil %	0

PERSONNEL				CASING			BHA
Lead Directional :	Bob Brewer			Size	Lb/ft	Set Depth	BHA # 1: Baker Hughes Q506 w/6x11s , SDI 3.3stg, MOTOR 1.25, Stabilizer 7 5/8 3-blades, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP.
Second Directional :	Brandon Burkett			9 5/8	36	2534	
MWD Operator1	Adam Merha			Signature:			
MWD Operator2	Tad Heil						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Kent Moore						
Incl. In:	0.78	Azm. In:	240.76	Incl. Out:	0.86	Azm. Out:	356.05

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
17-Mar-09	00:00	00:20	0.33	3495	3520	Sliding	Sliding - (WOB:8;GPM :462;TFO:350; DIFF PRESS 165)
17-Mar-09	00:20	01:00	0.67	3520	3586	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	01:00	01:05	0.08	3586	3586	Survey & Conn.	Survey & Conn.
17-Mar-09	01:05	02:00	0.92	3586	3676	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	02:00	02:05	0.08	3676	3676	Survey & Conn.	Survey & Conn.
17-Mar-09	02:05	02:45	0.67	3676	3767	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	02:45	02:50	0.08	3767	3767	Survey & Conn.	Survey & Conn.
17-Mar-09	02:50	03:30	0.67	3767	3857	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	03:30	03:35	0.08	3857	3857	Survey & Conn.	Survey & Conn.
17-Mar-09	03:35	04:15	0.67	3857	3948	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	04:15	04:20	0.08	3948	3948	Survey & Conn.	Survey & Conn.
17-Mar-09	04:20	05:00	0.67	3948	4038	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	05:00	05:05	0.08	4038	4038	Survey & Conn.	Survey & Conn.
17-Mar-09	05:05	05:50	0.75	4038	4078	Sliding	Sliding - (WOB:8;GPM :462;TFO:350)
17-Mar-09	05:50	06:20	0.50	4078	4129	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)
17-Mar-09	06:20	06:40	0.33	4129	4129	Survey & Conn.	Survey & Conn.
17-Mar-09	06:40	07:20	0.67	4129	4219	Drilling	Drilling - (WOB:12;GPM :440;RPM:45)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
17-Mar-09	07:20	07:35	0.25	4219	4219	Survey & Conn.	Survey & Conn.
17-Mar-09	07:35	07:50	0.25	4219	4244	Sliding	Sliding - (WOB:8;GPM :500;TFO:0)
17-Mar-09	07:50	08:10	0.33	4244	4310	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	08:10	08:30	0.33	4310	4310	Survey & Conn.	Survey & Conn.
17-Mar-09	08:30	08:50	0.33	4310	4330	Sliding	Sliding - (WOB:8;GPM :500;TFO:30)
17-Mar-09	08:50	09:10	0.33	4330	4400	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	09:10	09:45	0.58	4330	4330	Rig Service,Inhole	Rig Serv /conn surv
17-Mar-09	09:45	10:15	0.50	4400	4425	Sliding	Sliding - (WOB:8;GPM :500;TFO:30)
17-Mar-09	10:15	10:55	0.67	4425	4491	Drilling	Drilling - (WOB:8;GPM :500;RPM:55)
17-Mar-09	10:55	11:25	0.50	4491	4511	Sliding	Sliding - (WOB:8;GPM :500;TFO:30)
17-Mar-09	11:25	11:50	0.42	4511	4581	Drilling	Drilling - (WOB:8;GPM :500;RPM:55)
17-Mar-09	11:50	12:05	0.25	4581	4581	Survey & Conn.	Survey & Conn.
17-Mar-09	12:05	12:35	0.50	4581	4600	Sliding	Sliding - (WOB:8;GPM :500;TFO:20)
17-Mar-09	12:35	13:05	0.50	4600	4672	Drilling	Drilling - (WOB:8;GPM :500;RPM:55)
17-Mar-09	13:05	13:30	0.42	4672	4692	Sliding	Sliding - (WOB:8;GPM :500;TFO:20)
17-Mar-09	13:30	13:55	0.42	4692	4762	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	13:55	14:15	0.33	4762	4762	Survey & Conn.	Survey & Conn.
17-Mar-09	14:15	14:30	0.25	4762	4782	Sliding	Sliding - (WOB:8;GPM :500;TFO:10)
17-Mar-09	14:30	15:00	0.50	4782	4853	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	15:00	15:15	0.25	4853	4853	Survey & Conn.	Survey & Conn.
17-Mar-09	15:15	15:35	0.33	4853	4873	Sliding	Sliding - (WOB:8;GPM :500;TFO:10)
17-Mar-09	15:35	16:10	0.58	4873	4943	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	16:10	16:25	0.25	4943	4943	Survey & Conn.	Survey & Conn.
17-Mar-09	16:25	16:45	0.33	4943	4963	Sliding	Sliding - (WOB:8;GPM :500;TFO:10)
17-Mar-09	16:45	17:25	0.67	4963	5033	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	17:25	17:35	0.17	5033	5033	Survey & Conn.	Survey & Conn.
17-Mar-09	17:35	18:20	0.75	5033	5124	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	18:20	18:30	0.17	5124	5124	Survey & Conn.	Survey & Conn.
17-Mar-09	18:30	19:05	0.58	5124	5214	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	19:05	19:15	0.17	5214	5214	Survey & Conn.	Survey & Conn.
17-Mar-09	19:15	19:30	0.25	5214	5234	Sliding	Sliding - (WOB:14;GPM :500;TFO:0;DIFF PRESS 145)
17-Mar-09	19:30	20:00	0.50	5234	5305	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	20:00	21:10	1.17	5305	5305	Rig repair	WORK ON PUMPS
17-Mar-09	21:10	21:20	0.17	5305	5305	Survey & Conn.	Survey & Conn.
17-Mar-09	21:20	22:00	0.67	5305	5395	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	22:00	22:05	0.08	5395	5395	Survey & Conn.	Survey & Conn.
17-Mar-09	22:05	22:40	0.58	5395	5486	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	22:40	22:45	0.08	5486	5486	Survey & Conn.	Survey & Conn.
17-Mar-09	22:45	23:30	0.75	5486	5576	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
17-Mar-09	23:30	23:35	0.08	5576	5576	Survey & Conn.	Survey & Conn.
17-Mar-09	23:35	23:50	0.25	5576	5596	Sliding	Sliding - (WOB:14;GPM :500;TFO:0;DIFF PRESS 165)
17-Mar-09	23:50	24:00	0.17	5596	5625	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)



JOB NO.:	42DEF0903122	Report Time:	2400	4 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECTIRANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Wednesday, March 18, 2009 at 0000 to Wednesday, March 18, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	5625.00	Rotary Hours	18.42	WOB	14	Pick UP	135	Slack Off	125	SPM	
End Depth	7451.00	Circulating Hours	0.00	RAB	130	SPP	1650	FlowRate	500 - 500	120	
Total Drilled:	1826.00	Avg. Total ROP:	85.93	Mud Data							
Total Rotary Drilled:	1694.00	Avg. Rotary ROP:	91.98	Type	H2O	PV	0	SOLID	0		
Total Drilled Sliding:	132.00	Avg. Slide ROP:	46.59	Weight	8.4	GAS	0	YP	0	BHT°	0
Slide Hours:	2.83	Percent Rotary:	92.77	Viscosity	26	SAND	0	PH	9.5	Flow T°	0
Below Rotary Hrs.	24.00	Percent Slide:	7.23	Chlorides	6800	WL	0			Oil %	0

PERSONNEL				CASING			BHA
Lead Directional :	Bob Brewer			Size	Lb/ft	Set Depth	BHA # 1:Baker Hughes Q506 w/6x11s , SDI 3.3stg. MOTOR 1.25, Stabilizer 7 5/8 3-blades, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,
Second Directional :	Brandon Burkett			9 5/8	36	2534	
MWD Operator1	Adam Merha			Signature:			
MWD Operator2	Tad Heil						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Dale O Driscoll / Kent Moore						
Incl. In:	0.86	Azm. In:	356.05	Incl. Out:	0.29	Azm. Out:	324.82

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
18-Mar-09	00:00	00:20	0.33	5625	5666	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	00:20	00:25	0.08	5666	5666	Survey & Conn.	Survey & Conn.
18-Mar-09	00:25	01:05	0.67	5666	5757	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	01:05	01:10	0.08	5757	5757	Survey & Conn.	Survey & Conn.
18-Mar-09	01:10	01:45	0.58	5757	5847	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	01:45	01:50	0.08	5847	5847	Survey & Conn.	Survey & Conn.
18-Mar-09	01:50	02:05	0.25	5847	5862	Sliding	Sliding - (WOB:14;GPM :500;TFO:180;DIFF PRESS 170)
18-Mar-09	02:05	02:40	0.58	5862	5938	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	02:40	02:45	0.08	5938	5938	Survey & Conn.	Survey & Conn.
18-Mar-09	02:45	03:30	0.75	5938	6028	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	03:30	03:35	0.08	6028	6028	Survey & Conn.	Survey & Conn.
18-Mar-09	03:35	04:20	0.75	6028	6119	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	04:20	04:25	0.08	6119	6119	Survey & Conn.	Survey & Conn.
18-Mar-09	04:25	04:45	0.33	6119	6134	Sliding	Sliding - (WOB:14;GPM :500;TFO:30;DIFF PRESS 125)
18-Mar-09	04:45	05:25	0.67	6134	6209	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	05:25	05:35	0.17	6209	6209	Survey & Conn.	Survey & Conn.
18-Mar-09	05:35	05:50	0.25	6209	6221	Sliding	Sliding - (WOB:14;GPM :500;TFO:330;DIFF PRESS 125)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
18-Mar-09	05:50	06:30	0.67	6221	6300	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	06:30	06:35	0.08	6300	6300	Survey & Conn.	Survey & Conn.
18-Mar-09	06:35	08:10	1.58	6300	6481	Drilling	Drilling - (WOB:12;GPM :500;RPM:55)
18-Mar-09	08:10	08:25	0.25	6481	6481	Survey & Conn.	Survey & Conn.
18-Mar-09	08:25	08:55	0.50	6481	6501	Sliding	Sliding - (WOB:14;GPM :500;TFO:330)
18-Mar-09	08:55	10:20	1.42	6501	6662	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	10:20	10:40	0.33	6662	6662	Survey & Conn.	Survey & Conn.
18-Mar-09	10:40	11:00	0.33	6662	6682	Sliding	Sliding - (WOB:14;GPM :500;TFO:290)
18-Mar-09	11:00	13:10	2.17	6682	6843	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	13:10	13:40	0.50	6843	6843	Rig Service-Inhole	Rig Service-Inhole
18-Mar-09	13:40	14:45	1.08	6843	6942	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	14:45	15:20	0.58	6942	6942	Survey & Conn.	Survey & Conn.
18-Mar-09	15:20	15:50	0.50	6942	6967	Sliding	Sliding - (WOB:14;GPM :500;TFO:350)
18-Mar-09	15:50	18:05	2.25	6967	7114	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	18:05	18:10	0.08	7114	7114	Survey & Conn.	Survey & Conn.
18-Mar-09	18:10	19:30	1.33	7114	7204	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	19:30	19:35	0.08	7204	7204	Survey & Conn.	Survey & Conn.
18-Mar-09	19:35	21:10	1.58	7204	7295	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	21:10	21:15	0.08	7295	7295	Survey & Conn.	Survey & Conn.
18-Mar-09	21:15	21:55	0.67	7295	7320	Sliding	Sliding - (WOB:14;GPM :500;TFO:0;DIFF PRESS 170)
18-Mar-09	21:55	23:00	1.08	7320	7386	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
18-Mar-09	23:00	23:05	0.08	7386	7386	Survey & Conn.	Survey & Conn.
18-Mar-09	23:05	24:00	0.92	7386	7451	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)



JOB NO.:	42DEF0903122	Report Time:	2400	5 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT/RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Thursday, March 19, 2009 at 0000 to Thursday, March 19, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	7451.00	Rotary Hours	19.33	WOB	18	Pick UP	180	Slack Off	160	SPM	
End Depth	8653.00	Circulating Hours	0.00	RAB	170	SPP	2250	FlowRate	485 - 500	116	
Total Drilled:	1202.00	Avg. Total ROP:	54.84	Mud Data							
Total Rotary Drilled:	1114.00	Avg. Rotary ROP:	57.62	Type	LSND	PV	0	SOLID	0		
Total Drilled Sliding:	88.00	Avg. Slide ROP:	34.06	Weight	9.6	GAS	0	YP	0	BHT°	0
Slide Hours:	2.58	Percent Rotary:	92.68	Viscosity	35	SAND	0	PH	9.5	Flow T°	0
Below Rotary Hrs.	24.00	Percent Slide:	7.32	Chlorides	6800	WL	0	Oil %		0	

PERSONNEL				cASING			BHA
Lead Directional :	Bob Brewer			Size	Lb/ft	Set Depth	BHA # 1: Baker Hughes Q506 w/6x11s , SDI 3.3stg. MOTOR 1.25, Stabilizer 7 5/8 3-blades, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,
Second Directional :	Brandon Burkett/ Heath Beck			9 5/8	36	2534	
MWD Operator1	Adam Merha			Signature:			
MWD Operator2	Tad Heil						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Dale O Driscoll						
Incl. In:	0.29	Azm. In:	324.82	Incl. Out:	0.47	Azm. Out:	84.98

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
19-Mar-09	00:00	00:35	0.58	7451	7476	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
19-Mar-09	00:35	00:40	0.08	7476	7476	Survey & Conn.	Survey & Conn.
19-Mar-09	00:40	01:10	0.50	7476	7491	Sliding	Sliding - (WOB:14;GPM :500;TFO:330;DIFF PRESS 150)
19-Mar-09	01:10	02:30	1.33	7491	7566	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
19-Mar-09	02:30	02:35	0.08	7566	7566	Survey & Conn.	Survey & Conn.
19-Mar-09	02:35	04:20	1.75	7566	7657	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
19-Mar-09	04:20	04:30	0.17	7657	7657	Survey & Conn.	Survey & Conn.
19-Mar-09	04:30	05:00	0.50	7657	7677	Sliding	Sliding - (WOB:14;GPM :500;TFO:330;DIFF PRESS 210)
19-Mar-09	05:00	06:20	1.33	7677	7747	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
19-Mar-09	06:20	06:30	0.17	7747	7747	Survey & Conn.	Survey & Conn.
19-Mar-09	06:30	09:40	3.17	7747	7928	Drilling	Drilling - (WOB:14;GPM :500;RPM:55)
19-Mar-09	09:40	10:05	0.42	7928	7928	Survey & Conn.	Survey & Conn.
19-Mar-09	10:05	12:45	2.67	7928	8110	Drilling	Drilling - (WOB:14;GPM :485;RPM:55)
19-Mar-09	12:45	13:15	0.50	8110	8110	Rig Service-Inhole	Rig Service-Inhole
19-Mar-09	13:15	16:10	2.92	8110	8291	Drilling	Drilling - (WOB:14;GPM :485;RPM:55) 150psi differential
19-Mar-09	16:10	16:30	0.33	8291	8291	Survey & Conn.	Survey & Conn.
19-Mar-09	16:30	17:05	0.58	8291	8314	Sliding	Sliding - (WOB:14;GPM :500;TFO:330) 125 diff psi

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
19-Mar-09	17:05	18:15	1.17	8314	8381	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
19-Mar-09	18:15	18:20	0.08	8381	8381	Survey & Conn.	Survey & Conn.
19-Mar-09	18:20	18:50	0.50	8381	8396	Sliding	Sliding - (WOB:14;GPM :485;TFO:330;DIFF PRESS 160)
19-Mar-09	18:50	20:10	1.33	8396	8472	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
19-Mar-09	20:10	20:20	0.17	8472	8472	Survey & Conn.	Survey & Conn.
19-Mar-09	20:20	22:10	1.83	8472	8562	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
19-Mar-09	22:10	22:15	0.08	8562	8562	Survey & Conn.	Survey & Conn.
19-Mar-09	22:15	22:45	0.50	8562	8577	Sliding	Sliding - (WOB:14;GPM :485;TFO:330;DIFF PRESS 150)
19-Mar-09	22:45	24:00	1.25	8577	8653	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)



JOB NO.:	42DEF0903122	Report Time:	2400	6 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECTRANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Friday, March 20, 2009 at 0000 to Friday, March 20, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	8653.00	Rotary Hours	12.50	WOB	18	Pick UP	180	Slack Off	160	SPM	
End Depth	9105.00	Circulating Hours	5.00	RAB	170	SPP	2620	FlowRate	439 - 485	116	
Total Drilled:	452.00	Avg. Total ROP:	33.07	Mud Data							
Total Rotary Drilled:	427.00	Avg. Rotary ROP:	34.16	Type	LSND	PV	10	SOLID	15		
Total Drilled Sliding:	25.00	Avg. Slide ROP:	21.43	Weight	10.9	GAS	0	YP	9	BHT°	0
Slide Hours:	1.17	Percent Rotary:	94.47	Viscosity	37	SAND	15	PH	8.5	Flow T°	96
Below Rotary Hrs.	24.00	Percent Slide:	5.53	Chlorides	6200	WL	16.8			Oil %	0

PERSONNEL		cASING			BHA				
Lead Directional :	Bob Brewer/PHILIP ALVARADO	Size	Lb/ft	Set Depth	BHA # 1: Baker Hughes Q506 w/6x11s , SDI 3.3stg. MOTOR 1.25, Stabilizer 7 5/8 3-blades, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,				
Second Directional :	Brandon Burket/ Heath Beck	9 5/8	36	2534					
MWD Operator1	Adam Merha	Signature:							
MWD Operator2	Rick Perry								
Directional Company:	Scientific Drilling International								
Geologist:									
Company Man:	Dale O Driscoll	Incl. In:	0.47	Azm. In:	84.98	Incl. Out:	0.86	Azm. Out:	172.2

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Mar-09	00:00	00:05	0.08	8653	8653	Survey & Conn.	Survey & Conn.
20-Mar-09	00:05	01:10	1.08	8653	8721	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
20-Mar-09	01:10	06:00	4.83	8721	8721	Other	TAKE KICK; SHUT IN WELL
20-Mar-09	06:00	08:30	2.50	8721	8721	Change Mud	Change Mud-build volume
20-Mar-09	08:30	10:45	2.25	8721	8721	Circulating	Circulating-Circ. through choke.
20-Mar-09	10:45	11:00	0.25	8721	8721	Circulating	Circulating-Open Bop and flow test to get back to drilling
20-Mar-09	11:00	11:50	0.83	8721	8743	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
20-Mar-09	11:50	11:55	0.08	8743	8743	Survey & Conn.	Survey & Conn.
20-Mar-09	11:55	14:15	2.33	8743	8834	Drilling	Drilling - (WOB:18;GPM :439;RPM:55)
20-Mar-09	14:15	14:20	0.08	8834	8834	Survey & Conn.	Survey & Conn.
20-Mar-09	14:20	17:55	3.58	8834	8924	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
20-Mar-09	17:55	18:00	0.08	8913	8924	Survey & Conn.	Survey & Conn.
20-Mar-09	18:00	20:50	2.83	8924	9015	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
20-Mar-09	20:50	21:00	0.17	9015	9015	Survey & Conn.	Survey & Conn.
20-Mar-09	21:00	22:10	1.17	9015	9040	Sliding	Sliding - (WOB:14;GPM :485;TFO:270;DIFF PRESS 175)
20-Mar-09	22:10	24:00	1.83	9040	9105	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)



JOB NO.:	42DEF0903122	Report Time:	2400	7 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT\ RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Saturday, March 21, 2009 at 0000 to Saturday, March 21, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	9105.00	Rotary Hours	5.83	WOB	18	Pick UP	180	Slack Off	160	SPM	
End Depth	9319.00	Circulating Hours	1.67	RAB	170	SPP	2620	FlowRate	485 - 485	116	
Total Drilled:	214.00	Avg. Total ROP:	31.70	Mud Data							
Total Rotary Drilled:	194.00	Avg. Rotary ROP:	33.26	Type	LSND	PV	10	SOLID	15		
Total Drilled Sliding:	20.00	Avg. Slide ROP:	21.82	Weight	10.9	GAS	0	YP	9	BHT°	0
Slide Hours:	0.92	Percent Rotary:	90.65	Viscosity	37	SAND	15	PH	8.5	Flow T°	96
Below Rotary Hrs.	23.00	Percent Slide:	9.35	Chlorides	6200	WL	16.8			Oil %	0

PERSONNEL				cASING			BHA
Lead Directional :	Philip Alvarado/Derrick Wilson			Size	Lb/ft	Set Depth	BHA # 1: Baker Hughes Q506 w/6x11s , SDI 3.3stg. MOTOR 1.25, Stabilizer 7 5/8 3-blades, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,
Second Directional :	Brandon Burkett/ Heath Beck			9 5/8	36	2534	
MWD Operator1	Adam Merha			Signature:			
MWD Operator2	Rick Perry						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Dale O Driscoll						
Incl. In:	0.86	Azm. In:	172.2	Incl. Out:	0.5	Azm. Out:	206.2

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
21-Mar-09	00:00	00:10	0.17	9105	9105	Survey & Conn.	Survey & Conn.
21-Mar-09	00:10	02:20	2.17	9105	9196	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
21-Mar-09	02:20	02:25	0.08	9196	9196	Survey & Conn.	Survey & Conn.
21-Mar-09	02:25	03:20	0.92	9196	9216	Sliding	Sliding - (WOB:14;GPM :485;TFO:0;DIFF PRESS 175)
21-Mar-09	03:20	05:30	2.17	9216	9286	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
21-Mar-09	05:30	05:35	0.08	9286	9286	Survey & Conn.	Survey & Conn.
21-Mar-09	05:35	07:05	1.50	9286	9319	Drilling	Drilling - (WOB:18;GPM :485;RPM:55)
21-Mar-09	07:05	08:45	1.67	9319	9319	Circulating	Circulating
21-Mar-09	08:45	21:30	12.75	9319	9319	POOH	POOH
21-Mar-09	21:30	22:30	1.00	9319	9319	L/D DP	L/D EM tool, and mud motor
21-Mar-09	22:30	24:00	1.50	9319	9319	Other	Restab wear bushing



JOB NO.:	42DEF0903122	Report Time:	2400	8 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT/RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Sunday, March 22, 2009 at 0000 to Sunday, March 22, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	9319.00	Rotary Hours	11.42	WOB	7	Pick UP	212	Slack Off	190	SPM	
End Depth	9766.00	Circulating Hours	1.00	RAB	200	SPP	2160	FlowRate	0 - 485	105	
Total Drilled:	547.00	Avg. Total ROP:	47.91	Mud Data							
Total Rotary Drilled:	547.00	Avg. Rotary ROP:	47.91	Type	LSND	PV	12	SOLID	21		
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	11.6	GAS	0	YP	11	BHT°	0
Slide Hours:	0.00	Percent Rotary:	100.00	Viscosity	40	SAND	1	PH	8	Flow T°	110
Below Rotary Hrs.	24.00	Percent Slide:	.00	Chlorides	4700	WL	12	Oil %	0		

PERSONNEL				cASING			BHA
Lead Directional :	Philip Alvarado			Size	Lb/ft	Set Depth	BHA # 2:Q506X 6x14's, 6.5 MUD MOTOR 1.25, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,
Second Directional :	Derrick Wilson/ Heath Beck			9 5/8	36	2534	
MWD Operator1	Adam Merha			Signature:			
MWD Operator2	Rick Perry						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Dale O Driscoll						
Incl. In:	0.5	Azm. In:	206.2	Incl. Out:	1.45	Azm. Out:	143.15

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
22-Mar-09	00:00	00:45	0.75	9319	9319	Change BHA	Change BHA
22-Mar-09	00:45	10:30	9.75	9319	9319	TIH	TIH
22-Mar-09	10:30	11:00	0.50	9319	9319	Rig repair	Rig repair-work on top drive
22-Mar-09	11:00	12:00	1.00	9319	9319	Reaming	Rig repair
22-Mar-09	12:00	13:55	1.92	9319	9377	Drilling	Drilling - (WOB:18; :485;RPM:55)
22-Mar-09	13:55	14:15	0.33	9377	9377	Survey & Conn.	Survey & Conn.
22-Mar-09	14:15	16:05	1.83	9377	9467	Drilling	Drilling - (WOB:7; :440;RPM:55)
22-Mar-09	16:05	16:10	0.08	9367	9367	Survey & Conn.	Survey & Conn.
22-Mar-09	16:10	22:45	6.58	9367	9732	Drilling	Drilling - (WOB:7;GPM :440;RPM:55)
22-Mar-09	22:45	22:55	0.17	9732	9732	Survey & Conn.	Survey & Conn.
22-Mar-09	22:55	24:00	1.08	9732	9766	Drilling	Drilling - (WOB:7;GPM :440;RPM:55)



JOB NO.:	42DEF0903122	Report Time:	2400	9 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT/RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Monday, March 23, 2009 at 0000 to Monday, March 23, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	9766.00	Rotary Hours	9.67	WOB	12	Pick UP	212	Slack Off	190	SPM	
End Depth	10075.00	Circulating Hours	7.17	RAB	200	SPP	2190	FlowRate	440 - 440	105	
Total Drilled:	309.00	Avg. Total ROP:	31.97	Mud Data							
Total Rotary Drilled:	309.00	Avg. Rotary ROP:	31.97	Type	LSND	PV	12	SOLID	21		
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	11.6	GAS	0	YP	11	BHT°	0
Slide Hours:	0.00	Percent Rotary:	100.00	Viscosity	40	SAND	1	PH	8	Flow T°	110
Below Rotary Hrs.	24.00	Percent Slide:	.00	Chlorides	4700	WL	12	Oil %	0		

PERSONNEL				CASING			BHA				
Lead Directional :	Philip Alvarado			Size	Lb/ft	Set Depth	BHA # 2:Q506X 6x14's, 6.5 MUD MOTOR 1.25, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,				
Second Directional :	Derrick Wilson/ Heath Beck			9 5/8	36	2534					
MWD Operator1	Adam Merha			Signature:							
MWD Operator2	Rick Perry										
Directional Company:	Scientific Drilling International										
Geologist:											
Company Man:	Dale O Driscoll			Incl. In:	1.45	Azm. In:	143.15	Incl. Out:	1.95	Azm. Out:	143.99

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
23-Mar-09	00:00	01:20	1.33	9766	9823	Drilling	Drilling - (WOB:7;GPM :440;RPM:55)
23-Mar-09	01:20	01:30	0.17	9823	9823	Survey & Conn.	Survey & Conn.
23-Mar-09	01:30	03:30	2.00	9823	9913	Drilling	Drilling - (WOB:7;GPM :440;RPM:55)
23-Mar-09	03:30	03:40	0.17	9913	9913	Survey & Conn.	Survey & Conn.
23-Mar-09	03:40	07:10	3.50	9913	10004	Drilling	Drilling - (WOB:7;GPM :440;RPM:55)
23-Mar-09	07:10	07:15	0.08	10004	10004	Survey & Conn.	Survey & Conn.
23-Mar-09	07:15	10:05	2.83	10004	10075	Drilling	Drilling - (WOB:12;GPM :440;RPM:55)
23-Mar-09	10:05	12:00	1.92	10075	10075	Circulating	Circulating
23-Mar-09	12:00	13:45	1.75	10075	10075	Short Trip	Short Trip
23-Mar-09	13:45	19:00	5.25	10075	10075	Circulating	Circulating
23-Mar-09	19:00	24:00	5.00	10075	10075	POOH	POOH



JOB NO.:	42DEF0903122	Report Time:	2400	10 of 10
COMPANY:	Kerr McGee Oil and Gas Onshore LP	API JOB #		
LOCATION:	NBU 921-27C Pad	WORK ORDER#	136292	
RIG NAME:	Ensign 139	FIELD:	Natural Buttes Unit	
STATE:	Utah	Township:	Sec 27 T9S R21E	
COUNTY:	Uintah	SECT/RANGE:		Rocky Mountain
WELL NAME:	NBU 921-27C2D			

From Tuesday, March 24, 2009 at 0000 to Tuesday, March 24, 2009 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	0.00	Rotary Hours	0.00	WOB	12	Pick UP	212	Slack Off	190	SPM	
End Depth	0.00	Circulating Hours	0.00	RAB	200	SPP	2190	FlowRate	440 - 440	105	
Total Drilled:	0.00	Avg. Total ROP:	NA	Mud Data							
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	NA	Type	LSND	PV	12	SOLID	21		
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	11.6	GAS	0	YP	11	BHT°	0
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	40	SAND	1	PH	8	Flow T°	110
Below Rotary Hrs.	6.00	Percent Slide:	NA	Chlorides	4700	WL	12		Oil %	0	

PERSONNEL			cASING			BHA	
Lead Directional :	Philip Alvarado		Size	Lb/ft	Set Depth	BHA # 2:Q506X 6x14's, 6.5 MUD MOTOR 1.25, NMPC, 6.5 HOS, 6.5 NMDC, 6.5 HOS, 6.5 GAP , 6.5 NMDC, 6.5 NMPC, 30 JTS HWDP,	
Second Directional :	Derrick Wilson		9 5/8	36	2534		
MWD Operator1	Adam Merha		Signature:				
MWD Operator2	Rick Perry						
Directional Company:	Scientific Drilling International						
Geologist:							
Company Man:	Dale O Driscoll						
Incl. In:	1.95	Azm. In:	143.99	Incl. Out:	1.95	Azm. Out:	143.99

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
24-Mar-09	00:00	06:00	6.00	10075	10075	POOH	POOH
24-Mar-09	06:00	07:00	1.00	10075	10075	L/D DP	L/D Directional tools
24-Mar-09	07:00	24:00	17.00	10075	10075	Standby	Standby for EOW operations

BHA # 1

JOB NO.: 42DEF0903122 **Work Order:** 136292
COMPANY: Kerr McGee Oil and Gas Onshore LP
LOCATION: NBU 921-27C Pad
RIG NAME: Ensign 139
STATE: Utah
COUNTY: Uintah
WELL NAME: NBU 921-27C2D

FIELD: Natural Buttes Unit
Township: Sec 27 T9S R21E
SECT. RANGE: Rocky Mountain
Lead DD: Philip Alvarado/Derrick Wilson
Co. Man: Dale O Driscoll
BHA TYPE: Steerable Assembly
BHA WT: 33698 **Wt @ Jars:** N/A

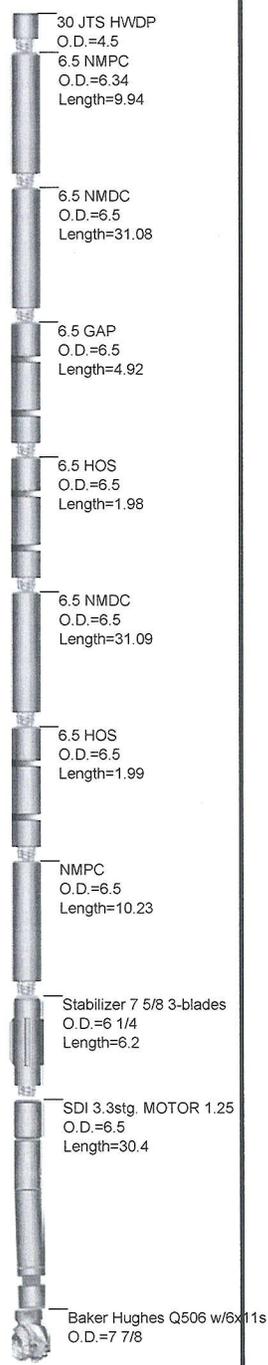
Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 16-Mar-09 @ 02:30	SDI MOTOR	SO/PU: 94 - 160 / 95-180
Date Out: 21-Mar-09 @ 22:30	MFG.: SDI	Rot Strg Wt: 94-170
Hrs In Hole: 139.00	PAD OD:	WOB: 5 - 18
Start Depth: 2359.00	NB Stab: 0	TORQ: 0 - 0
End Depth: 9319.00	Bit to Bend: 0	SPP: 950 - 2620
Total Drilled: 6948.00	Bent Hsg/Sub°: 1.25 /	Motor RPM: 62 - 70
Avg. Total ROP: 74.05	Lobe/Stage: 7/8 / 3.3	Rotary RPM: 45 - 55
Circ Hrs: Tot/Only 100.50 / 6.67	Rev/GAL: 0.14	Flow Rate: 439 - 500
Percent Slide: 9.14	Rotor Jet: 0	Avg Diff:
Percent Hrs: 14.92	Prop BUR:	Stall Pres.:
Slide Hours: 14.00	Act BUR:	Off Bot Pres.:
Total Sliding: 635.00	Mud Data	
Avg. Slide ROP: 45.36	Bit Record	
Percent Rotary: 90.86	Type LSND	BAKER / Baker Hughes Q506 w/6x11s
Percent Hrs: 85.08	WT: 10.9	GAS: 0
Rotary Hours: 79.83	Vis: 37	PV: 10
Total Rotary: 6313.00	WL: 16.8	PH: 8.5
Avg. Rotary ROP: 79.08	SOL: 15	SAND: 15
Reason POOH: PR	Oil %: 0	T °: 0
	Chlor: 6200	YP: 9

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 61	Last Casing 9 5/8
	GYRO: 0	DNCS: 2437	Sonic: 0	Shoe @: 2534
				Hanger @:

INC IN: .0 **INC OUT:** .6 **AZM IN:** .00 **AZM OUT:** 168.58

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Baker Hughes Q506 w/6x11s	7122246		7 7/8	1.00	1.00	4 1/2 REGP	
SDI 3.3stg. MOTOR 1.25	689	3.25	6.5	30.40	31.40	4 1/2 XHB	
Stabilizer 7 5/8 3-blades	M7182	2 1/4	6 1/4	6.20	37.60	4 1/2 XHB	
NMPC	650-10-0116	3.25	6.5	10.23	47.83	4 1/2 XHB	
6.5 HOS	8-458	3.25	6.5	1.99	49.82	4 1/2 XHB	
6.5 NMDC	122-354	3.25	6.5	31.09	80.91	4 1/2 XHB	
6.5 HOS	8-457	3.25	6.5	1.98	82.89	4 1/2 XHB	
6.5 GAP	69-150	2 7/8	6.5	4.92	87.81	4 1/2 XHB	
6.5 NMDC	122-359	3.25	6.5	31.08	118.89	4 1/2 XHB	
6.5 NMPC	650-10-0105	3.25	6.34	9.94	128.83	4 1/2 XHB	
30 JTS HWDP	RIG 139	2.88	4.5	922.07	1050.90	4 1/2 XHB	





JOB NO.: 42DEF0903122
COMPANY: Kerr McGee Oil and Gas Onshore LP
LOCATION: NBU 921-27C Pad
RIG NAME: Ensign 139
STATE: Utah
COUNTY: Country
WELL NAME: NBU 921-27C2D

FIELD: Natural Buttes Unit
Township: Sec 27 T9S R21E
Range: Rocky Mountain

MOTOR INFORMATION	
Desc: SDI MOTOR	
Bent Hsg/Sub: 1.25/ 0	Bit to Bend: 0
PAD OD:	NB Stab:

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	16-Mar	Drilling	12:30	14:10	1.67	2564	2790	226	8	135.6	45	0	440	950		1.18	239.74	0.52	
1	16-Mar	Sliding	14:10	14:30	0.33	2790	2805	15	8	45.0		0	440	1250	5	1.13	205.64	0.74	
1	16-Mar	Drilling	14:30	15:00	0.50	2805	2862	57	8	114.0	45	0	440	1250		0.72	54.38	0.74	
1	16-Mar	Drilling	15:15	15:50	0.58	2862	2862	0	8	0.0	45	0	440	1250		0.72	54.38	0.74	
1	16-Mar	Sliding	15:50	16:10	0.33	2874	2890	16	8	48.0		0	440	1250	40	0.52	156.93	0.74	
1	16-Mar	Drilling	16:10	16:40	0.50	2890	2956	66	12	132.0	45	0	440	1250		0.86	164.87	0.69	
1	16-Mar	Drilling	17:05	17:55	0.83	2956	3043	87	12	104.4	45	0	440	1250		0.72	339.96	1.33	
1	16-Mar	Sliding	18:00	18:30	0.50	3043	3068	25	8	50.0		0	440	1250	330	0.60	265.54	1.33	
1	16-Mar	Drilling	18:30	19:10	0.67	3068	3133	65	12	97.5	45	0	440	1250		0.48	236.19	0.25	
1	16-Mar	Drilling	19:20	20:10	0.83	3133	3224	91	12	109.2	45	0	440	1250		0.63	287.85	0.93	
1	16-Mar	Sliding	21:10	21:30	0.33	3224	3244	20	8	60.0		0	462	1355		0.69	307.56	0.93	
1	16-Mar	Drilling	21:30	22:15	0.75	3244	3314	70	12	93.3	45	0	440	1355		0.79	292.46	0.56	
1	16-Mar	Drilling	22:20	23:05	0.75	3314	3405	91	12	121.3	45	0	440	1355		0.79	253.69	0.59	
1	16-Mar	Drilling	23:15	23:50	0.58	3405	3495	90	12	154.3	45	0	440	1355		1.07	292.54	1.44	
1	17-Mar	Sliding	00:00	00:20	0.33	3495	3520	25	8	75.0		0	462	1355	350	1.19	314.12	1.44	
1	17-Mar	Drilling	00:20	01:00	0.67	3520	3586	66	12	99.0	45	0	440	1355		0.72	323.70	0.84	
1	17-Mar	Drilling	01:05	02:00	0.92	3586	3676	90	12	98.2	45	0	440	1355		0.27	250.44	0.62	
1	17-Mar	Drilling	02:05	02:45	0.67	3676	3767	91	12	136.5	45	0	440	1355		0.28	68.49	0.25	
1	17-Mar	Drilling	02:50	03:30	0.67	3767	3857	90	12	135.0	45	0	440	1355		0.48	173.17	0.24	
1	17-Mar	Drilling	03:35	04:15	0.67	3857	3948	91	12	136.5	45	0	440	1355		0.92	301.00	0.66	
1	17-Mar	Drilling	04:20	05:00	0.67	3948	4038	90	12	135.0	45	0	440	1355		0.57	186.18	0.90	
1	17-Mar	Sliding	05:05	05:50	0.75	4038	4078	40	8	53.3		0	500	1355		0.36	187.54	0.79	
1	17-Mar	Drilling	05:50	06:20	0.50	4078	4129	51	12	102.0	45	0	440	1355		0.76	194.42	0.79	
1	17-Mar	Drilling	06:40	07:20	0.67	4129	4219	90	12	135.0	55	0	500	1400		1.05	12.89	1.68	
1	17-Mar	Sliding	07:35	07:50	0.25	4219	4244	25	8	100.0		0	500	1400	30	1.07	85.57	1.68	
1	17-Mar	Drilling	07:50	08:10	0.33	4244	4310	66	12	198.0	55	0	500	1400		0.93	99.10	0.28	
1	17-Mar	Sliding	08:30	08:50	0.33	4310	4330	20	8	60.0		0	500	1400	30	0.88	97.79	0.28	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	17-Mar	Drilling	08:50	09:10	0.33	4330	4400	70	8	210.0	55	0	500	1600		0.56	1.45	1.33	
1	17-Mar	Sliding	09:45	10:15	0.50	4400	4425	25	8	50.0		0	500	1400	330	0.44	321.58	1.33	
1	17-Mar	Drilling	10:15	10:55	0.67	4425	4491	66	8	99.0	55	0	500	1400		0.90	325.75	0.86	
1	17-Mar	Sliding	10:55	11:25	0.50	4491	4511	20	8	40.0		0	500	1400	20	1.06	330.33	0.86	
1	17-Mar	Drilling	11:25	11:50	0.42	4511	4581	70	8	168.0	55	0	500	1400		1.27	344.37	0.47	
1	17-Mar	Sliding	12:05	12:35	0.50	4581	4600	19	8	38.0		0	500	1400	20	1.31	348.09	0.47	
1	17-Mar	Drilling	12:35	13:05	0.50	4600	4672	72	12	144.0	55	0	500	1450		1.20	14.21	0.87	
1	17-Mar	Sliding	13:05	13:30	0.42	4672	4692	20	8	48.0		0	500	1450	10	1.15	22.14	0.87	
1	17-Mar	Drilling	13:30	13:55	0.42	4692	4762	70	12	168.0	55	0	500	1450		0.98	14.58	0.42	
1	17-Mar	Sliding	14:15	14:30	0.25	4762	4782	20	8	80.0		0	500	1450	10	0.93	10.74	0.42	
1	17-Mar	Drilling	14:30	15:00	0.50	4782	4853	71	12	142.0	55	0	500	1450		1.31	3.30	0.71	
1	17-Mar	Sliding	15:15	15:35	0.33	4853	4873	20	8	60.0		0	500	1450	10	1.45	1.53	0.71	
1	17-Mar	Drilling	15:35	16:10	0.58	4873	4943	70	12	120.0	55	0	500	1450		1.93	353.81	0.78	
1	17-Mar	Sliding	16:25	16:45	0.33	4943	4963	20	14	60.0		0	500	1450	350	2.07	351.54	0.78	
1	17-Mar	Drilling	16:45	17:25	0.67	4963	5033	70	12	105.0	55	0	500	1450		1.90	352.64	0.42	
1	17-Mar	Drilling	17:35	18:20	0.75	5033	5124	91	12	121.3	55	0	500	1450		1.31	0.08	0.82	
1	17-Mar	Drilling	18:30	19:05	0.58	5124	5214	90	12	154.3	55	0	500	1450		1.57	355.50	0.88	
1	17-Mar	Sliding	19:15	19:30	0.25	5214	5234	20	14	80.0		0	500	1450		1.74	352.93	0.88	
1	17-Mar	Drilling	19:30	20:00	0.50	5234	5305	71	12	142.0	55	0	500	1450		1.60	349.54	0.40	
1	17-Mar	Drilling	21:20	22:00	0.67	5305	5395	90	12	135.0	55	0	500	1450		1.34	355.54	0.36	
1	17-Mar	Drilling	22:05	22:40	0.58	5395	5486	91	12	156.0	55	0	500	1450		1.00	357.08	0.46	
1	17-Mar	Drilling	22:45	23:30	0.75	5486	5576	90	12	120.0	55	0	500	1450		1.40	352.08	0.91	
1	17-Mar	Sliding	23:35	23:50	0.25	5576	5596	20	14	80.0		0	500	1450		1.58	350.75	0.91	
1	17-Mar	Drilling	23:50	24:00	0.17	5596	5625	29	12	174.0	55	0	500	1450		1.57	349.41	0.51	
1	18-Mar	Drilling	00:00	00:20	0.33	5625	5666	41	12	123.0	55	0	500	1450		1.37	347.95	0.51	
1	18-Mar	Drilling	00:25	01:05	0.67	5666	5757	91	12	136.5	55	0	500	1450		1.02	342.97	0.34	
1	18-Mar	Drilling	01:10	01:45	0.58	5757	5847	90	12	154.3	55	0	500	1450		0.51	254.46	1.25	
1	18-Mar	Sliding	01:50	02:05	0.25	5847	5862	15	14	60.0		0	500	1450	200	0.41	232.82	1.25	
1	18-Mar	Drilling	02:05	02:40	0.58	5862	5938	76	12	130.3	55	0	500	1450		0.43	191.16	0.30	
1	18-Mar	Drilling	02:45	03:30	0.75	5938	6028	90	12	120.0	55	0	500	1450		0.61	185.08	0.18	
1	18-Mar	Drilling	03:35	04:20	0.75	6028	6119	91	12	121.3	55	0	500	1450		0.67	9.04	1.01	
1	18-Mar	Sliding	04:25	04:45	0.33	6119	6134	15	14	45.0		0	500	1450	30	0.67	54.62	1.01	
1	18-Mar	Drilling	04:45	05:25	0.67	6134	6209	75	12	112.5	55	0	500	1450		0.34	114.43	0.57	
1	18-Mar	Sliding	05:35	05:50	0.25	6209	6221	12	14	48.0		0	500	1450	330	0.27	117.27	0.57	
1	18-Mar	Drilling	05:50	06:30	0.67	6221	6300	79	12	118.5	55	0	500	1450		0.38	131.29	0.35	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	18-Mar	Drilling	06:35	08:10	1.58	6300	6481	181	14	114.3	55	0	500	1650		0.98	291.16	0.80	
1	18-Mar	Sliding	08:25	08:55	0.50	6481	6501	20	14	40.0	55	0	500	1650	290	1.05	220.47	0.80	
1	18-Mar	Drilling	08:55	10:20	1.42	6501	6662	161	14	113.6	55	0	500	1650		0.76	20.18	1.41	
1	18-Mar	Sliding	10:40	11:00	0.33	6662	6682	20	14	60.0	55	0	500	1650	350	0.55	86.29	1.41	
1	18-Mar	Drilling	11:00	13:10	2.17	6682	6843	161	14	74.3	55	0	500	1650		0.72	134.68	0.40	
1	18-Mar	Drilling	13:40	14:45	1.08	6843	6942	99	14	91.4	55	0	500	1650		0.54	284.33	0.99	
1	18-Mar	Sliding	15:20	15:50	0.50	6942	6967	25	14	50.0	55	0	500	1650	300	0.46	218.14	0.54	
1	18-Mar	Drilling	15:50	18:05	2.25	6967	7114	147	14	65.3	55	0	500	1650		0.74	230.85	0.37	
1	18-Mar	Drilling	18:10	19:30	1.33	7114	7204	90	14	67.5	55	0	500	1650		0.71	197.15	0.52	
1	18-Mar	Drilling	19:35	21:10	1.58	7204	7295	91	14	57.5	55	0	500	1650		0.43	276.80	1.05	
1	18-Mar	Sliding	21:15	21:55	0.67	7295	7320	25	14	37.5		0	500	1650		0.32	315.53	1.05	
1	18-Mar	Drilling	21:55	23:00	1.08	7320	7386	66	14	60.9	55	0	500	1650		0.22	8.81	0.31	
1	18-Mar	Drilling	23:05	24:00	0.92	7386	7451	65	14	70.9	55	0	500	1650		0.24	341.09	0.50	
1	19-Mar	Drilling	00:00	00:35	0.58	7451	7476	25	14	42.9	55	0	500	1650		0.27	305.58	0.50	
1	19-Mar	Sliding	00:40	01:10	0.50	7476	7491	15	14	30.0		0	500	1650	330	0.29	284.27	0.50	
1	19-Mar	Drilling	01:10	02:30	1.33	7491	7566	75	14	56.3	55	0	500	1650		0.36	244.69	0.20	
1	19-Mar	Drilling	02:35	04:20	1.75	7566	7657	91	14	52.0	55	0	500	1650		0.65	298.93	1.00	
1	19-Mar	Sliding	04:30	05:00	0.50	7657	7677	20	14	40.0	55	0	500	1650	330	0.74	320.16	1.00	
1	19-Mar	Drilling	05:00	06:20	1.33	7677	7747	70	14	52.5	55	0	500	1650		0.80	342.64	0.28	
1	19-Mar	Drilling	06:30	09:40	3.17	7747	7928	181	14	57.2	55	0	485	2200		0.58	11.45	0.36	
1	19-Mar	Drilling	10:05	12:45	2.67	7928	8110	182	14	68.3	55	0	485	2200		0.28	81.23	0.47	
1	19-Mar	Drilling	13:15	16:10	2.92	8110	8291	181	18	62.1	55	0	485	2200		0.83	107.77	0.34	
1	19-Mar	Sliding	16:30	17:05	0.58	8291	8314	23	14	39.4	55	0	485	2250	330	0.91	107.20	0.34	
1	19-Mar	Drilling	17:05	18:15	1.17	8314	8381	67	18	57.4	55	0	485	2250		0.51	65.66	0.92	
1	19-Mar	Sliding	18:20	18:50	0.50	8381	8396	15	14	30.0	55	0	485	2250	330	0.40	55.32	0.92	
1	19-Mar	Drilling	18:50	20:10	1.33	8396	8472	76	18	57.0	55	0	485	2250		0.41	71.42	0.35	
1	19-Mar	Drilling	20:20	22:10	1.83	8472	8562	90	18	49.1	55	0	485	2250		0.45	105.70	0.27	
1	19-Mar	Sliding	22:15	22:45	0.50	8562	8577	15	14	30.0	55	0	485	2250	330	0.45	110.88	0.27	
1	19-Mar	Drilling	22:45	24:00	1.25	8577	8653	76	18	60.8	55	0	485	2250		0.45	151.40	0.44	
1	20-Mar	Drilling	00:05	01:10	1.08	8653	8721	68	18	62.8	55	0	485	2250		0.42	163.11	0.13	
1	20-Mar	Drilling	11:00	11:50	0.83	8721	8743	22	18	26.4	55	0	439	2250		0.40	159.75	0.13	
1	20-Mar	Drilling	11:55	14:15	2.33	8743	8834	91	18	39.0	55	0	485	2620		0.60	122.68	0.60	
1	20-Mar	Drilling	14:20	17:55	3.58	8834	8924	90	18	25.1	55	0	485	2620		0.87	97.50	0.34	
1	20-Mar	Drilling	18:00	20:50	2.83	8924	9015	91	18	32.1	55	0	485	2620		0.90	145.75	1.30	
1	20-Mar	Sliding	21:00	22:10	1.17	9015	9040	25	14	21.4	55	0	485	2620	270	0.88	167.79	1.30	

Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	20-Mar	Drilling	22:10	24:00	1.83	9040	9105	65	18	35.5	55	0	485	2620		0.97	172.03	0.14	
1	21-Mar	Drilling	00:10	02:20	2.17	9105	9196	91	18	42.0	55	0	485	2620		0.67	314.78	0.73	
1	21-Mar	Sliding	02:25	03:20	0.92	9196	9216	20	14	21.8	55	0	485	2620		0.56	242.39	0.73	
1	21-Mar	Drilling	03:20	05:30	2.17	9216	9286	70	18	32.3	55	0	485	2620		0.55	64.48	0.38	
1	21-Mar	Drilling	05:35	07:05	1.50	9286	9319	33	18	22.0	55	0	485	2620		0.57	168.58	0.33	

Total Drilled:	6948	Avg. Total ROP:	74.05	DEPTH% - TIME %
Total Rotary Drilled:	6313	Avg. Rotary ROP:	79.08	Percent Rotary: 90.86 - 85.08
Total Drilled Sliding:	635	Avg. Slide ROP:	45.36	Percent Slide: 9.14 - 14.92

BHA # 2

JOB NO.: 42DEF0903122 Work Order: 136292
 COMPANY: Kerr McGee Oil and Gas Onshore LP
 LOCATION: NBU 921-27C Pad
 RIG NAME: Ensign 139
 STATE: Utah
 COUNTY: Uintah
 WELL NAME: NBU 921-27C2D

FIELD: Natural Buttes Unit
 Township: Sec 27 T9S R21E
 SECT. RANGE: Rocky Mountain
 Lead DD: Philip Alvarado
 Co. Man: Dale O Driscoll
 BHA TYPE: Steerable Assembly
 BHA WT: 32753 Wt @ Jars: N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 22-Mar-09 @ 00:00	6.5 1.25 bend, 7:8 lobe, 3.3	SO/PU: 160 - 190 / 180-212
Date Out: 24-Mar-09 @ 07:00	MFG.: Scientific Drilling	Rot Strg Wt: 170-200
Hrs In Hole: 54.00	PAD OD: 6 3/4	WOB: 7 - 12
Start Depth: 9319.00	NB Stab: 0	TORQ: 0 - 0
End Depth: 10075.00	Bit to Bend: 5.27	SPP: 2160 - 2190
Total Drilled: 856.00	Bent Hsg/Sub°: 1.25 / 1.25	Motor RPM: -
Avg. Total ROP: 40.60	Lobe/Stage: 7:8 / 3.3	Rotary RPM: 55 - 55
Circ Hrs: Tot/Only 29.25 / 8.17	Rev/GAL: 0.14	Flow Rate: 440 - 440
Percent Slide: .00	Rotor Jet: 0	Avg Diff:
Percent Hrs: .00	Prop BUR:	Stall Pres.:
Slide Hours: .00	Act BUR:	Off Bot Pres.:
Total Sliding: .00		
Avg. Slide ROP: NA		
Percent Rotary: 100.00		
Percent Hrs: 100.00		
Rotary Hours: 21.08		
Total Rotary: 856.00		
Avg. Rotary ROP: 40.60		
Reason POOH:		

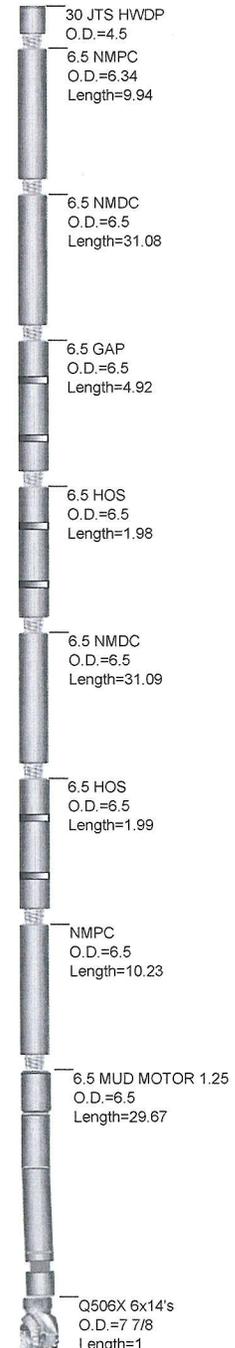
Mud Data		Bit Record	
Type	LSND	BAKER / Q506X 6x14's	
WT:	11.6	GAS:	0
Vis:	40	PV:	12
WL:	12	PH:	8
SOL:	21	SAND:	1
Oil %:	0	T %:	0
Chlor:	4700	YP:	11
Run #:	2		
Type Bit:	PDC		
IADC#:	TFA: 0.902		
JETS:	6-14		
Bit Drop:	254 PSI @ 440 GPM		
Cond.:			

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 61	Last Casing	Shoe @:	Hanger @:
	GYRO: 0	DNCS: 0	Sonic: 0			

INC IN: .6 INC OUT: 2.0 AZM IN: 168.58 AZM OUT: 143.99

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
Q506X 6x14's	7121212		7 7/8	1.00	1.00	4 1/2 REGP	
6.5 MUD MOTOR 1.25	6524	3.25	6.5	29.67	30.67	4 1/2 XHB	
NMPC	650-10-0116	3.25	6.5	10.23	40.90	4 1/2 XHB	
6.5 HOS	8-458	3.25	6.5	1.99	42.89	4 1/2 XHB	
6.5 NMDC	122-354	3.25	6.5	31.09	73.98	4 1/2 XHB	
6.5 HOS	8-457	3.25	6.5	1.98	75.96	4 1/2 XHB	
6.5 GAP	69-150	2 7/8	6.5	4.92	80.88	4 1/2 XHB	
6.5 NMDC	122-359	3.25	6.5	31.08	111.96	4 1/2 XHB	
6.5 NMPC	650-10-0105	3.25	6.34	9.94	121.90	4 1/2 XHB	
30 JTS HWDP	RIG 139	2.88	4.5	922.07	1043.97	4 1/2 XHB	





JOB NO.: 42DEF0903122
 COMPANY: Kerr McGee Oil and Gas Onshore LP
 LOCATION: NBU 921-27C Pad
 RIG NAME: Ensign 139
 STATE: Utah
 COUNTY: Country
 WELL NAME: NBU 921-27C2D

FIELD: Natural Buttes Unit
 Township: Sec 27 T9S R21E
 Range: Rocky Mountain

MOTOR INFORMATION	
Desc: 6.5 1.25 bend, 7:8 lobe, 3.3 stage	
Bent Hsg/Sub: 1.25/ 1.25 Bit to Bend: 5.27	
PAD OD: 6 3/4	NB Stab:

Slide Report for BHA # 2

Note: Surveys listed are interpolated from the actual surveys

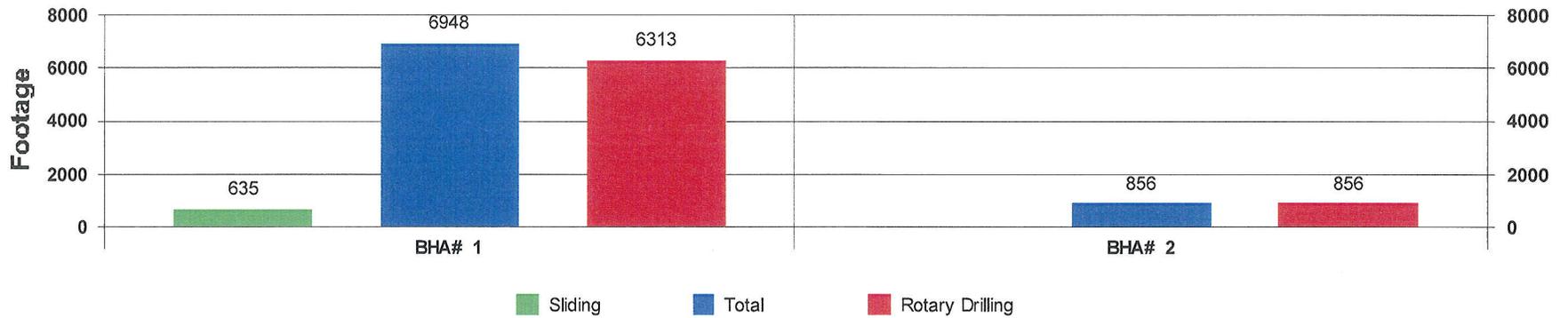
#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
2	22-Mar	Drilling	12:00	13:55	1.92	9319	9377	58	7	30.3	55	0	440	2160		0.54	148.29	0.33	
2	22-Mar	Drilling	14:15	16:05	1.83	9377	9467	90	7	49.1	55	0	440	2160		0.80	145.06	0.45	
2	22-Mar	Drilling	16:10	22:45	6.58	9367	9732	365	7	55.4	55	0	440	2160		1.47	140.41	0.13	
2	22-Mar	Drilling	22:55	24:00	1.08	9732	9766	34	7	31.4	55	0	440	2160		1.48	138.72	0.13	
2	23-Mar	Drilling	00:00	01:20	1.33	9766	9823	57	7	42.8	55	0	440	2160		1.75	144.36	0.58	
2	23-Mar	Drilling	01:30	03:30	2.00	9823	9913	90	7	45.0	55	0	440	2160		1.90	147.81	0.04	
2	23-Mar	Drilling	03:40	07:10	3.50	9913	10004	91	12	26.0	55	0	440	2190		1.94	144.82	0.19	
2	23-Mar	Drilling	07:15	10:05	2.83	10004	10075	71	12	25.1	55	0	440	2190		1.95	143.99	0.00	

Total Drilled:	856	Avg. Total ROP:	40.60	DEPTH% - TIME %
Total Rotary Drilled:	856	Avg. Rotary ROP:	40.60	Percent Rotary: 100.00 - 100.00
Total Drilled Sliding:	0	Avg. Slide ROP:	NA	Percent Slide: .00 - .00

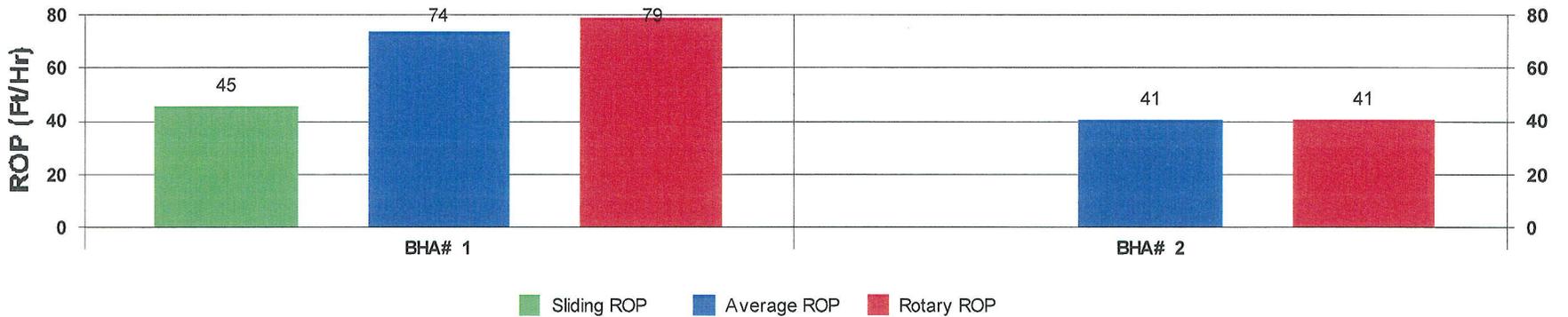


JOB NO.:	42DEF0903122	FIELD:	Natural Buttes Unit
COMPANY:	Kerr McGee Oil and Gas Onshore LP	Township:	Sec 27 T9S R21E
LOCATION:	NBU 921-27C Pad	SECTORANGE:	Rocky Mountain
RIG NAME:	Ensign 139	COMMENT	
STATE:	Utah		
COUNTY:	Uintah		
WELL NAME:	NBU 921-27C2D		

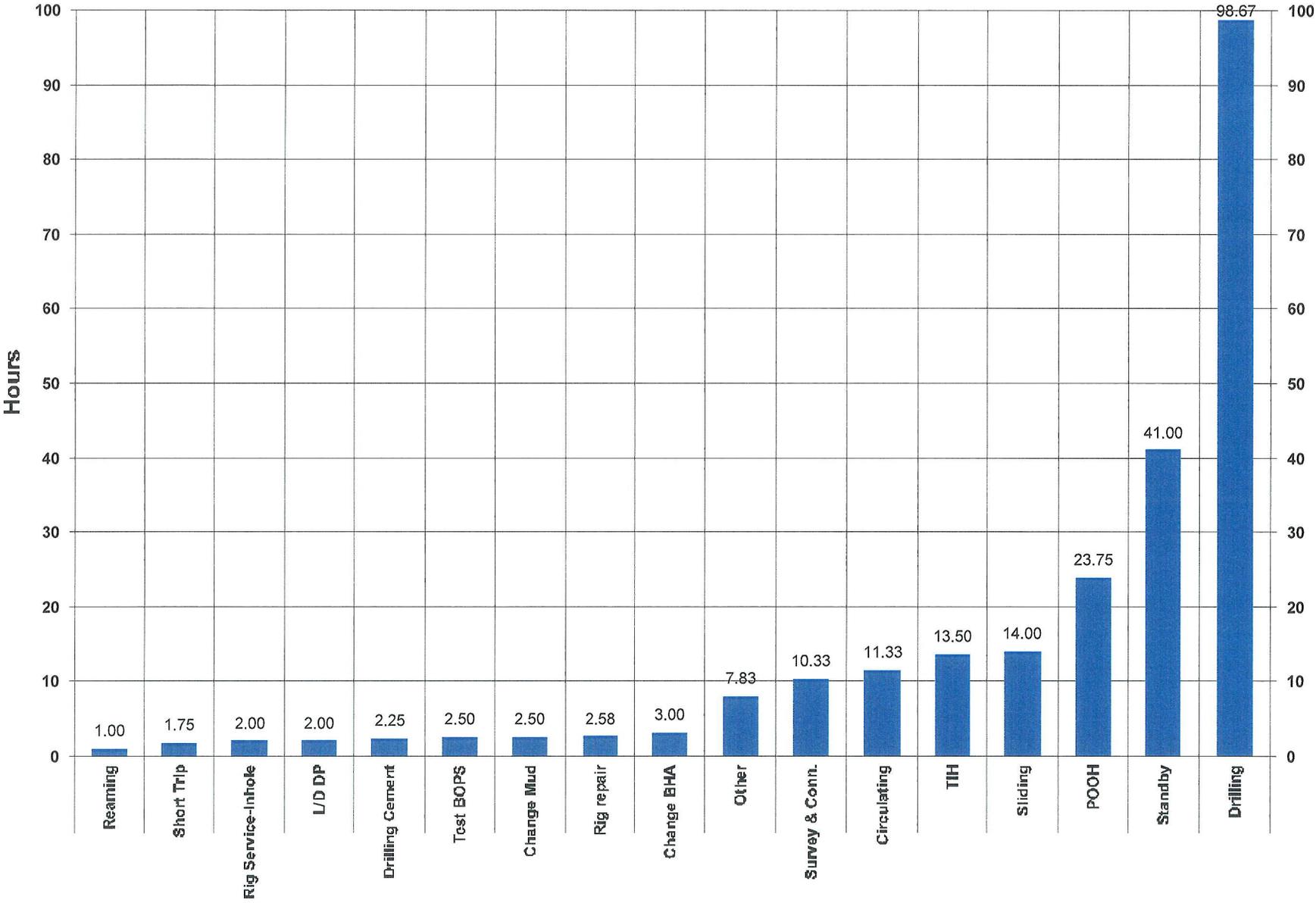
Footage Drilled with BHA



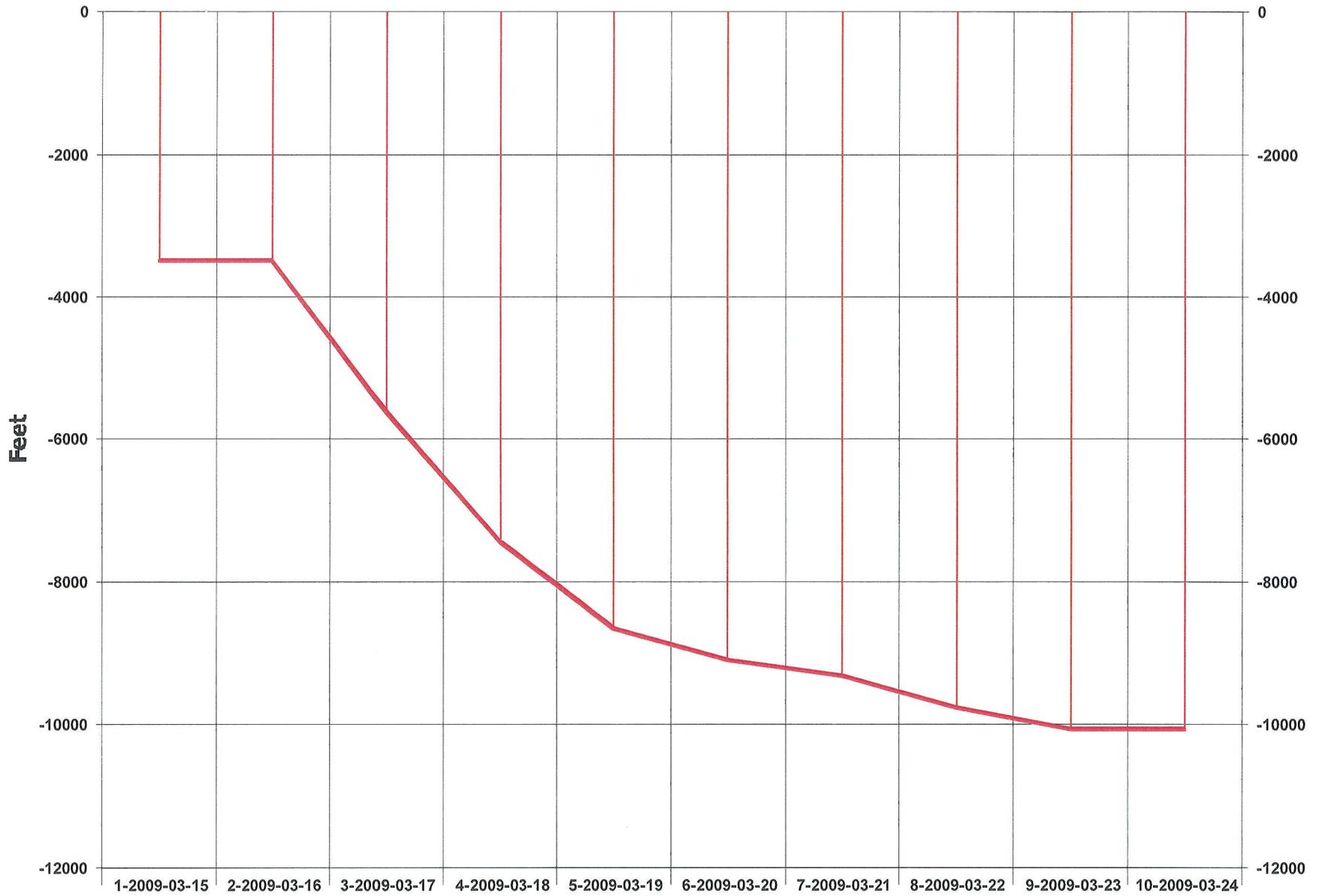
ROP vs BHA



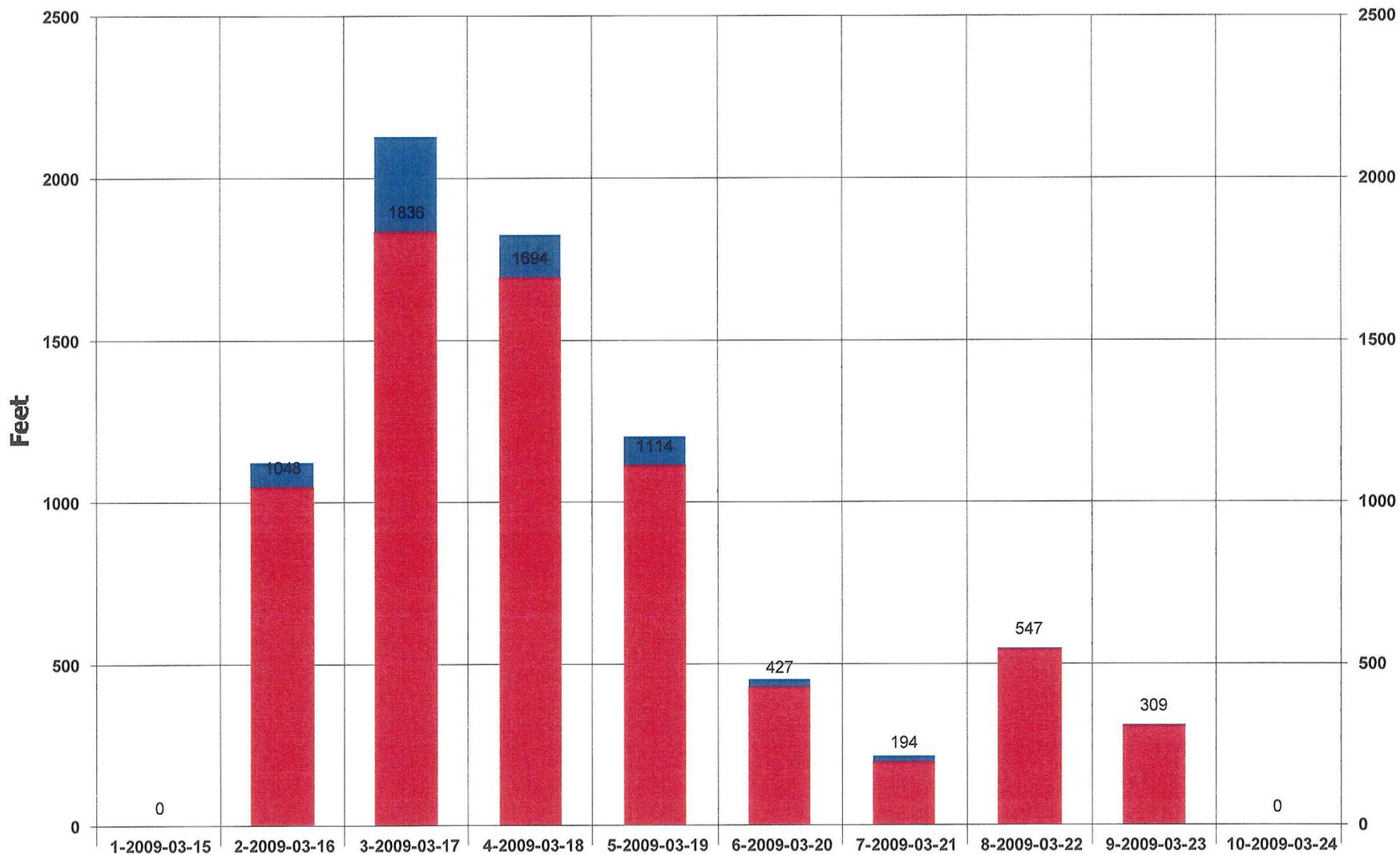
Activity Histogram



Measured Depth vs Days

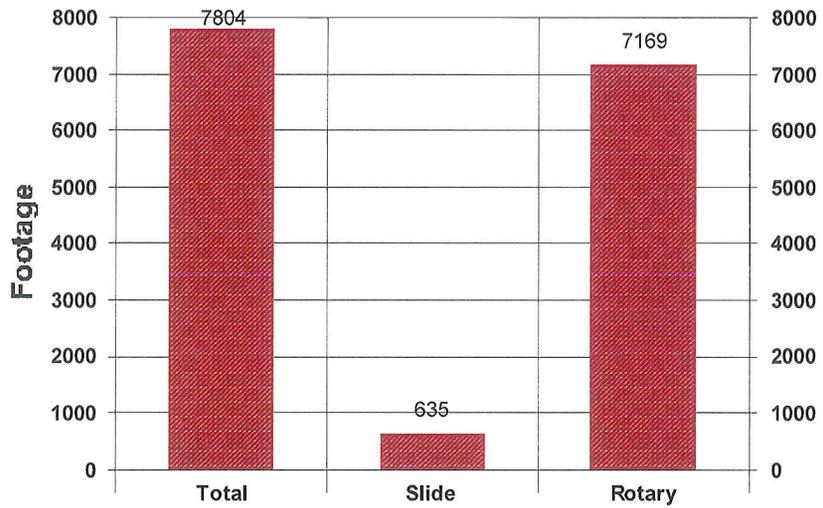


Daily Footage

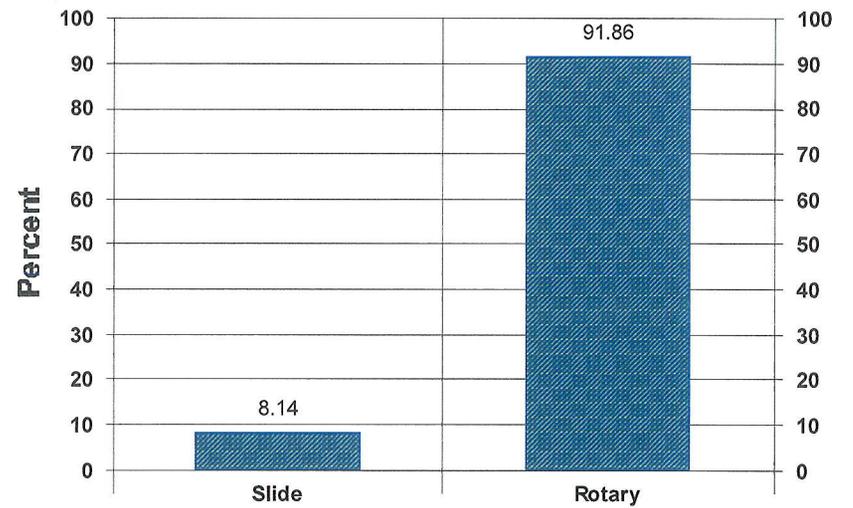


Rotary Drilling Sliding

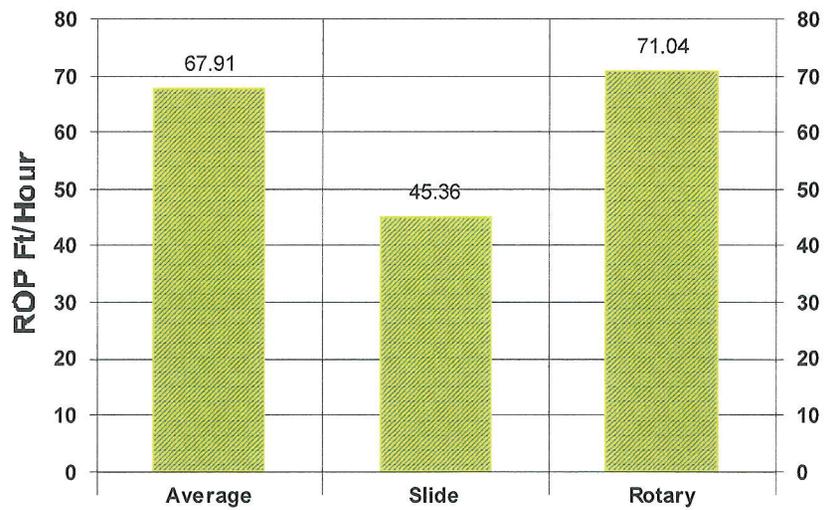
Footage Drilled Totals



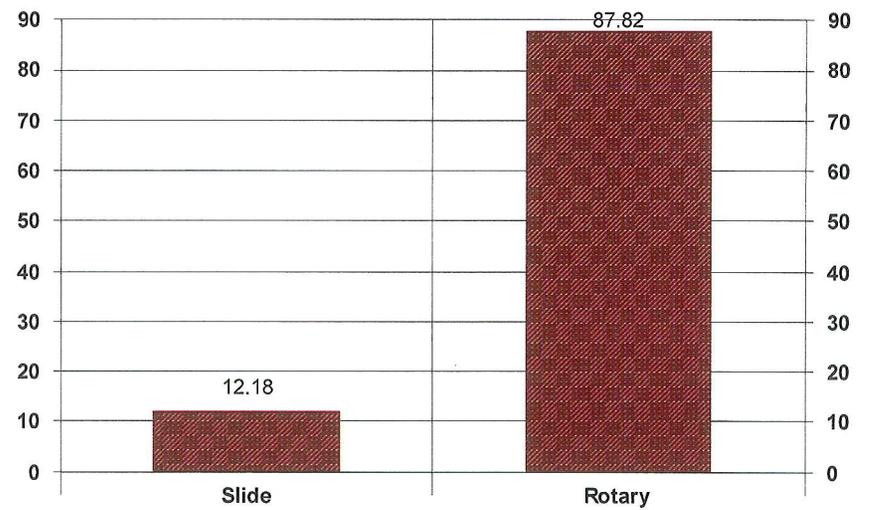
Footage Percent



Rate of Penetration Totals



Time Percent





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Rocky Mountain Operations

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MWD Operators:

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UO-1194-AST
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 921-27C2D
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047402270000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0650 FNL 1730 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 27 Township: 09.0S Range: 21.0E Meridian: S		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
		COUNTY: UINTAH
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="TUBING OBSTRUCTION"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 2/4/2016			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A WORKOVER FOR TUBING OBSTRUCTION HAS BEEN COMPLETED ON THE NBU 921-27C2D WELL PLEASE SEE THE ATTACHED OPERATIONS SUMMARY FOR DETAILS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
February 09, 2016

NAME (PLEASE PRINT) Kristina Geno	PHONE NUMBER 720 929-6824	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 2/8/2016	

US ROCKIES REGION
Operation Summary Report

US ROCKIES REGION								
Operation Summary Report								
Well: NBU 921-27C2D			Spud Conductor: 1/8/2009			Spud date: 1/24/2009		
Project: UTAH-UINTAH			Site: NBU 921-27D PAD			Rig name no.: MILES-GRAY 1/1		
Event: WELL WORK EXPENSE			Start date: 1/26/2016			End date: 1/28/2016		
Active datum: RKB @4,966.50usft (above Mean Sea Level)			UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
1/26/2016	7:00 - 7:15	0.25	MAINT	48		P		SAFETY = JSA.
	7:15 - 7:40	0.42	MAINT	30	G	P		WARM UP EQUIP. ROAD TO LOCATION.
	7:40 - 8:40	1.00	MAINT	30	A	P		MIRU. SPOT IN ALL EQUIP. LAY PUMP LINES, ETC.
	8:40 - 10:00	1.33	MAINT	30	F	P		FCP & FTP = 58#. BLOW DOWN TBNG TO FLAT TANK. CNTRL CSNG W/ 20BBLS TMAC. NDWH. UN-LAND TBG (TBG STUCK). STRIP IN 2-3/8" X 6' L-80 PUP JT. NUBOP. FUNCTION TEST. R/U FLOOR & TBNG EQUIP. UN-LAND TBG. REMOVE HANGER.
	10:00 - 10:40	0.67	MAINT	31	I	P		WORK STUCK TBNG FROM 10,000# TO 50,000#. TBNG PARTED @ 50,000#. TIH W/ 3JTS 2-3/8" P-110 TBNG & DID NOT TAG. REM OF TBNG FELL DOWN HOLE. L/D 3JTS TBNG USED TO WORK STRING & T/U.
1/26/2016	10:40 - 12:30	1.83	MAINT	31	I	P		MIRU SCANNERS. POOH WHILE SCANNING 45JTS 2-3/8" L-80 TBNG. FOUND GUALDED & PULLED THREADS WHERE THE TBNG PARTED (COLLAR LOOKING UP). 12JTS REJECTED DUE TO BAD THREADS ON THE PIN END. SOME JTS WERE NOT MADE UP ALL THE WAY (3-4 FULL THREADS EXPOSED).
	12:30 - 17:00	4.50	MAINT	31	B	P		PREP & TALLY NEW 2-3/8" P-110 TBNG ON PIPE RACKS. P/U & RIH W/ 3-1/16" OVERSHOT + 60JTS 2-3/8" P-110 NEW TBNG. T/U & LATCH FISH @ 1956'. PUH TBNG & FISH PARTED @ 50,000#. POOH WHILE STD BACK 60JTS P-110 FISHING STRING. L/D 62JTS 2-3/8" L-80 FISH (PIPE CORKSCREWED BADLY W/ PITTING IN THE PINS). TBNG WAS SPLIT +/- 4' ON THE END OF THE JT. LAST JT RECOVERED EXCEPT +/- 6" DEPENDING ON JT LENGTH. SWIFN. LOCK RAMS. DRAIN EQUIP. SDFN.
	1/27/2016	7:00 - 7:15	0.25	MAINT	48		P	SAFETY = JSA.
1/27/2016	7:15 - 13:00	5.75	MAINT	31	B	P		SICP= 300#. BLOW DOWN CSNG TO FLOWBACK TANK. CNTRL CSNG W/ 20BBLS TMAC. P/U & RIH W/ 3-7/8" SHOE, T-DOG, 3' X 3-3/4" WASH PIPE EXTENSION + 120JTS NEW 2-3/8" P-110 TBNG. T/U ON FISH TOP @3912'. SWALLOW FISH. PUH TO 50,000# & FISH STARTED MOVING. SLOWLY POOH WHILE STND BACK 120JTS 2-3/8" P-110 TBNG. L/D FISHING TOOLS. CONT POOH WHILE L/D REMAINING 197JTS 2-3/8" L-80 (TBNG CORCSCREWED & ALSO PITTING IN THE PINS). CUT OUT +/- 4500' OF SAND LINE WHILE POOH.
	13:00 - 17:00	4.00	MAINT	31	I	P		P/U & RIH W/ 3-7/8" MILL+POBS+1.875" XN+238JTS NEW 2-3/8" P-110 TBNG. BROACH ALL TBNG GOOD WHILE RIH W/ 1.910" BROACH. LEAVE TBNG @ 7714' (ABOVE PERFS OVERNIGHT). SWIFN. DRAIN EQUIP. LOCK RAMS. SDFN.
	1/28/2016	7:00 - 7:15	0.25	MAINT	48		P	SAFETY = JSA.

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-27C2D	Spud Conductor: 1/8/2009	Spud date: 1/24/2009
Project: UTAH-UINTAH	Site: NBU 921-27D PAD	Rig name no.: MILES-GRAY 1/1
Event: WELL WORK EXPENSE	Start date: 1/26/2016	End date: 1/28/2016
Active datum: RKB @4,966.50usft (above Mean Sea Level)	UWI: 0/9/S/21/E/27/0/NENW/6/PM/N/650.00/W/0/1,730.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	7:15 - 9:00	1.75	MAINT	31	I	P		SICP= 100#. SITP= 50#. BLOW DOWN WELL TO FLOWBACK TANK. CONT P/U & RIH W/ 3-7/8" MILL, POBS, 1.875" XN & NEW 2-3/8" P-110 TBNG. T/U ON SCALE @10,039' W/ 312 JTS + BHA. R/U POWER SWIVEL
	9:00 - 13:00	4.00	MAINT	31	N	P		MIRU N2 FOAM UNIT. BREAK CONV CIRC IN 2HRS. C/O SAND TO 10,084' (OLD POBS). CIRC WELL CLEAN FOR 45MIN. CNTRL TBNG W/ 10BBLs TMAC. R/D POWER SWIVEL.
	13:00 - 16:30	3.50	MAINT	31	I	P		POOH WHILE L/D 29JTS EXCESS TBNG. FINISH BROACHING TOP PART OF TBNG STRING W/ 1.910" BROACH. LAND TBNG ON HANGER. R/D FLOOR & TBG EQUIP. NDBOP. NUWH. R/U N2 FOAM UNIT. PUMP OFF MILL @1400#. CIRC WELL DRY TO FLOWBACK TANK. SWI. R/D. RACK OUT EQUIP. DRAIN EQUIP. PREP FOR MOVE MONDAY AM. SDFN. PRODUCTION TBNG LANDED AS FOLLOWS: KB= 14.00' HANGER= .83' 285JTS NEW 2-3/8" P-110 TBNG= 9199.88' 1.875" XN-POBS= 2.20' EOT @9216.91'
2/1/2016	7:00 - 11:00	4.00	PROD	42	B	P		FLUID LEVEL=5300
2/2/2016	7:00 - 15:00	8.00	PROD	42	B	P		FLUID LEVEL=5300
2/3/2016	7:00 - 11:00	4.00	MAINT	35		P		WO3764 TB 47 CS 708 FL 6580 Ran in w/Sample Baler to TD at 9944, pulled Fluid Sample, will not turn Sample in. Ran in w/1.909 Broach to SN at 9202, pulled out. Fluid Level is 6580. Dropped New Titanium spring w/Single X-cups and roll pin, chased w/Down Hole Hammer to SN, set Spring, pulled out. Left Well as Found. Called Pumper.
	7:00 - 11:00	4.00	PROD	42	B	P		FLUID LEVEL=6000
2/4/2016	7:00 - 13:30	6.50	PROD	42	B	P		FLUID LEVEL=5900